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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

JANUARY, 1961

VOLUME 58, NUMBER 1

Scientific Articles

THE USE OF DUOGRAFIN IN DIAGNOSING INTRA-ABDOMINAL MASSES: A PRELIMINARY REPORT, Herbert L. Warres, M.D., and Fred L. Nelson, M.D., St. Joseph 21

HYALINE MEMBRANE DISEASE: ITS PROPHYLAXIS AND TREATMENT, Daniel B. Landau, M.D., Hannibal 24

Case Report

DOUBLE BENIGN STRICTURES OF THE ESOPHAGUS FOLLOWING SUBTOTAL GASTRIC RESECTION, Frank J. Manganaro, M.D., St. Louis 31

Special Article

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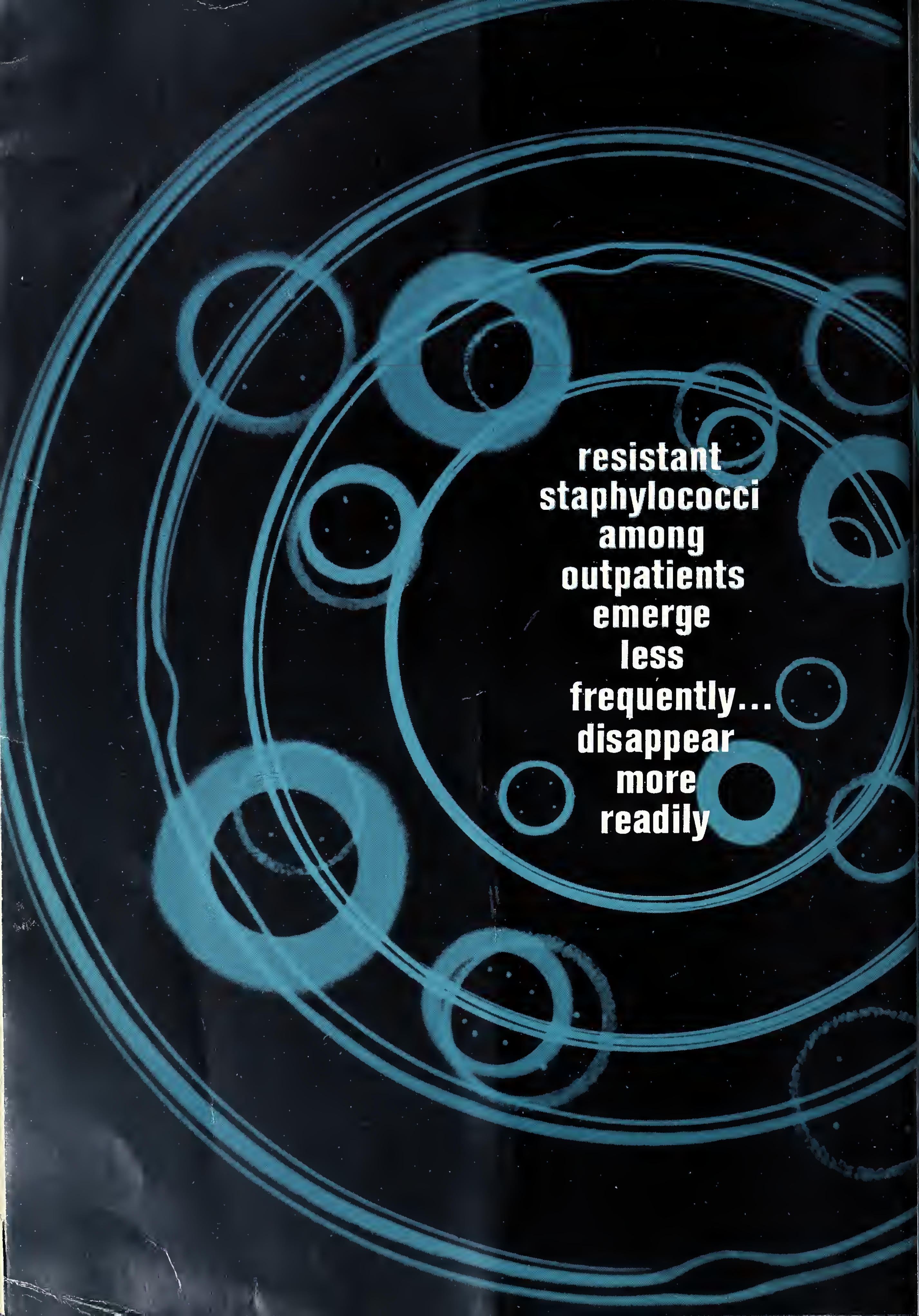
Annual Session, Kansas City, March 19-22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emerge
less
frequently...
disappear
more
readily

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"Resistance to chloramphenicol was surprisingly infrequent (0-5%)" among strains of staphylococci isolated from outpatients over a 5-year period. It was impressive to note that less than 6% of 310 strains isolated from patients treated in the emergency room were resistant to CHLOROMYCETIN. Moreover, it would appear "...that chloramphenicol-resistant staphylococci disappear more readily after leaving the hospital environment."[1]

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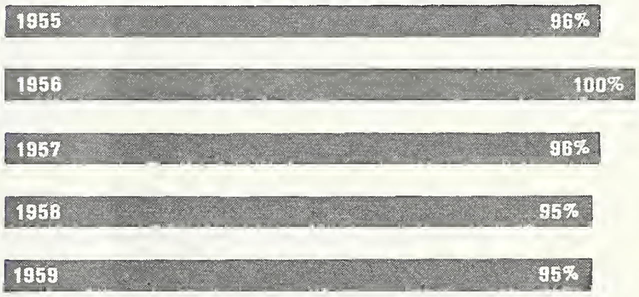
References: (1) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960. (2) Goslings, W. R. O., & Büchli, K.: *Arch. Int. Med.* 102:691, 1958. (3) Goodier, T. E. W., & Parry, W. R.: *Lancet* 1:356, 1959. (4) Fisher, M. W.: *Arch. Int. Med.* 105:413, 1960. (5) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* 105:398, 1960. (6) Glas, W. W., in Symposium on Antibacterial Therapy, Michigan & Wayne County Acad. Gen. Pract., Detroit, September 12, 1959, p. 7. (7) Modarress, Y.; Ryan, R. J., & Francis, Sr. C. F.: *J. M. Soc. New Jersey* 57:168, 1960. (8) Rebhan, A. W., & Edwards, H. E.: *Canad. M. A. J.* 82:513, 1960.

IN VITRO SENSITIVITY OF COAGULASE-POSITIVE STAPHYLOCOCCI TO CHLOROMYCETIN FROM 1955 TO 1959*



These sensitivity tests were done by the disc method on 310 strains of coagulase-positive staphylococci. Strains were isolated from patients seen in the emergency room. It should be noted that among inpatients, resistant strains were considerably more prevalent.

*Adapted from Bauer, Perry, & Kirby[1]

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

Pathology reports just don't come through as fast as they used to. But in case you've been waiting for the microscopic sections, that Comanchean dinosaur and the Mesozoic Platecarpus from Kansas that died about 100,000,000 years ago *did* have osteoarthritis.

A British dentist has reported variations in pain tolerance consistent with the color of the eyes. Blue-eyed people required no analgesia for dental drilling; about one third of the brown-eyed people required anesthesia; and over half of those with dark brown eyes required it.

Enough natural and synthetic estrogens are produced or imported into this country to treat seven million women with 1 milligram of estrogen a week for a year.

Universal *use* of seat belts in autos would save an estimated 5,500 Americans a year. Incidentally, it would save about $150,000.

Capsule Clinics

- Approximately 50 per cent of patients subjected to prostatectomy were sexually potent prior to surgery. Of these, about 70 per cent retained this funciton postoperatively, irrespective of the operative route. Finkle, A. L., and Moyers, T. G., J. Urol. 84:152, 1960.
- Duck embryo rabies vaccine induced definite immunity against street virus injected directly into the brain of rabbits—a rigorous test for any rabies vaccine. Powell, H. M., et al., J. Indiana M. S. 53:1307, 1960.
- Elevated serum alkaline phosphatase activity was observed in the majority of 73 patients with infectious mononucleosis. Barondess, J. A., and Earle, H., Am. J. Med. 29:43, 1960.
- The incidence of Staph. pyogenes in normal breast milk is approximately 3 per cent and not 90 per cent as has been stated. Foster, W. D., and Harris, R. E. J. Obst. & Gynec. Brit. Emp. 67:463, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Appointment

Among the first appointments made by President-elect Kennedy, and probably of most interest to medicine, was that of Gov. Abraham Ribicoff of Connecticut as Secretary of Health, Education and Welfare. When the announcement was made, Gov. Ribicoff was quoted as saying that in this field, his philosophy "is on all fours with the philosophy of President-elect Kennedy." Gov. Ribicoff is described as economy-minded and a judicious administrator. It is expected that he will abolish or make more important the post of Special Assistant for Health and Medical Affairs, which was established in 1953 but has been unfilled for months.

During the time that Gov. Ribicoff was in the House of Representatives and during his term as Governor of Connecticut he showed no interest in "compulsory health insurance." However, now he is a cabinet member in an administration that is pledged to work for broadening of Social Security which has been opposed by the medical profession.

"Freedom of Decision"

In a recent announcement of a 58 million dollar program for advancement of medicine at Harvard University, made by the president, Nathan M. Pusey, he stressed "freedom of decision" as a necessary incentive toward medical education and research. He said that foundation and federal grants are possible threats to that freedom and while the school will continue to accept grants, this possibility will be watched carefully.

Project HOPE

The waiting list of medical and paramedical personnel who have volunteered for service on the ship, HOPE, numbers more than 200. These include doctors, dentists, nurses, pharmacists, physical therapists and other medical personnel. The ship is in Surabaya, Indonesia, and has been accepted with great favor, according to Dr. William B. Walsh, president of the project. He also expressed the expectation that there may be HOPE II for Africa and HOPE III for South America in another year.

White House Conference on Aging

The Eisenhower-called White House Conference on Aging will be held in Washington, D. C., January 9 to 12. Among Missouri delegates to the conference, who were appointed by Governor James T. Blair, Jr., are the following Missouri physicians: Dr. Robert H. Barnes, Kansas City, Executive Director of the Greater Kansas City Mental Health Foundation; Dr. Joseph P. Costello, Jr., St. Louis, Medical Director, St. Louis Chronic Hospital; Dr. Addison M. Duval, Jefferson City, Director, Division of Mental Diseases; Dr. H. M. Hardwicke, Jefferson City, Acting Director, Division of Health; Dr. David Littauer, St. Louis, Executive Director, the Jewish Hospital of St. Louis; Dr. Stanley S. Peterson, Springfield, Chairman, Committee on Aging, Missouri State Medical Association; Dr. James M. A. Weiss, Department of Psychiatry, University of Missouri School of Medicine; Dr. Vernon B. Wilson, Columbia, Dean, University of Missouri School of Medicine; Dr. William B. Kountz, member, National Advisory Committee to the 1961 White House Conference on Aging. Mr. Emil E. Brill, St. Louis, Senior Vice President, General American Life Insurance Company, will head the delegates.

Hill-Burton Projects

A report on Hill-Burton projects on September 30, showed that the program has passed the four and a half billion dollar mark. There have been 5,246 projects approved since the plan came into being. Of these 3,684 are in operation and 1,335 are under construction. It is estimated that this will supply 220,955 new hospital beds, 1,463 health units and many rehabilitation, diagnostic and treatment facilities, as well as nursing homes.

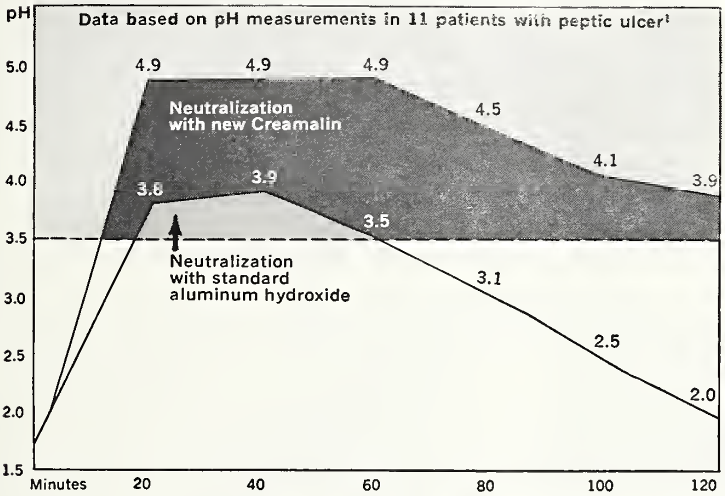
The total expenditure of the program has been approximately $4,520,617,041, of which the federal part has been $1,400,212,406.

Health Bills in Congress

The interest in medical and health bills by Congressmen has grown in recent years as is shown in a tabulation of the number introduced in recent sessions of Congress. In the 82nd Congress, 1951-1952, 250 measures were introduced; in the 84th Congress, 1955-1956, 571 measures were introduced, and in the 86th Congress, 1959-1960, there were 739 measures introduced.

At the site of peptic ulcer

Following determination of basal secretion, intragastric pH was continuously determined by means of frequent readings over a two-hour period.



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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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Across Missouri

HEALTH FAIR

Medicine's expanding role in the modern world will be depicted in a Health Fair to be held in Kansas City, March 18-26, 1961. The fair, to be held in the Exhibition Hall of the Municipal Auditorium, will be sponsored by physicians of the Medical Council of Greater Kansas City which includes members of the medical societies of Jackson and Clay counties in Missouri, and Johnson and Wyandotte counties in Kansas.

The council named Dr. Carroll P. Hungate, Kansas City, chairman of the policy committee; Dr. R. D. Dwyer, North Kansas City, secretary; Dr. Frederick J. McCoy, Kansas City, treasurer; Dr. John H. Mayer, Jr., Kansas City, assistant secretary, and Dr. Robert C. Fairchild, assistant treasurer.

The fair is being designed to broaden the health education of the people of that area. The physicians who are sponsoring the show are inviting the leading national and local health groups, the military and governmental health services, area hospital associations, medical schools and other paramedical agencies to tell their stories in dynamic easy-to-understand exhibits and displays. Designs are being drawn for 200 exhibits on two levels in the Exhibition Hall.

In cooperation with school officials within a 50 mile radius plans are being developed for high school students and upper grade school groups in public, private and parochial schools to attend. No admittance will be charged for students. One aim of the exposition is to stimulate interest of younger persons in following one of the more than 150 careers in the fields of health and medical research.

Many of the exhibits will be of the "audience-participation" type which visitors may activate by pushing buttons, twirling dials and stepping on treadles. One exhibit will explain seeing, hearing and breathing, while others will be devoted to such subjects as atomic medicine, cancer, heart disease, diabetes, cerebral palsy and mental health.

The part atomic energy and radioactive materials play in the diagnosis and treatment of many diseases will be depicted in a radiology exhibit at which x-rays of patients with lung cancer and other diseases may be viewed. Another demonstration will be physical therapy for the rehabilitation of the injured and incapacitated.

It is planned that the fair will be open from 1:00 p.m. to 9:00 p.m. daily.

TRANSPARENT WOMAN PREMIERED

The transparent aluminum and plexiglass full size model of a woman, given jointly by the St. Louis Medical Society and the St. Louis County Medical Society to the Natural History Museum in Oak Knoll Park, St. Louis County, was viewed by members of the two societies prior to the display being opened to the public.

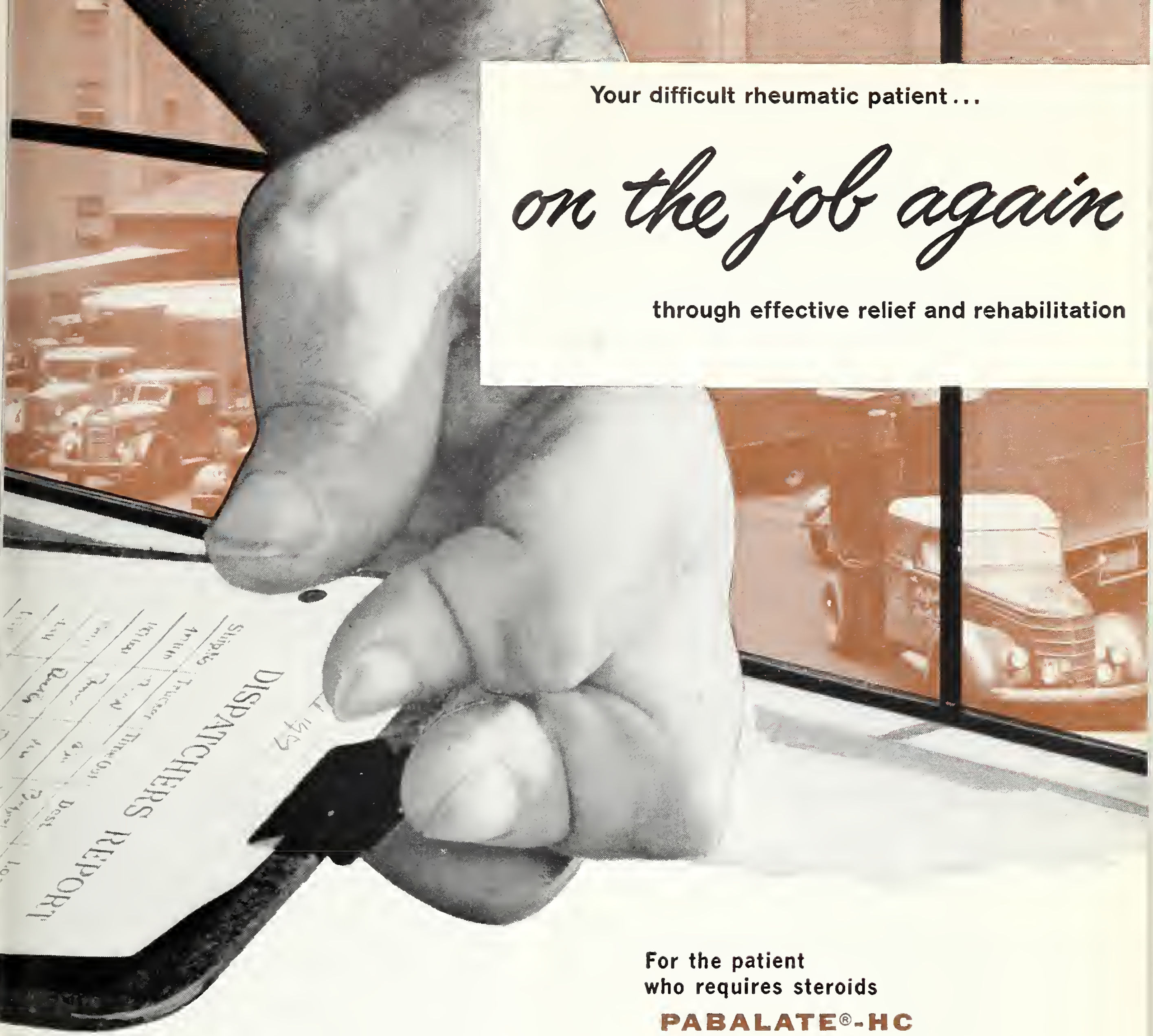
The transparent woman has a skeleton of aluminum and a "skin" of plexiglass. Several hundred feet of lighting cable and 30 small light bulbs show every organ and detail of the body in anatomically correct color, position and dimension. The lighting system is synchronized with magnetic tape-recorded speech, so that each of the organs is illuminated as the model describes it.

Three sound tracks are planned: one, a program for children through the third grade to stress good health; two, the standard presentation, and three, a special discussion of the human problems of survival in a space age.

PUBLIC HOSPITAL DISTRICT

A proposed "public hospital district" for Jackson County has been endorsed by the Executive Council of the Jackson County Medical Society. A Citizens Study Committee report was reviewed by Drs. V. Bryce Ballard, Hector W. Benoit, Jr., Ralph R. Coffey and Wallace R. Stacey who were appointed by the medical society, at the request of the City Council of Kansas City and the County Court to serve on the committee with their appointees.

The Society studied and approved proposed enabling legislation by the Missouri General Assembly required to provide the authority for establishing the district by the county court.



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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

The 12th Annual Scientific Assembly of the Missouri Academy of General Practice, held at the Chase Hotel in St. Louis, November 5 and 6, registered a total of 550 people. Of this number, 250 were physicians and 75 were medical students. Fifteen scientific speakers appeared upon the two day program; six of these from out of the state, with the other nine from Missouri, where they hold various faculty appointments on the medical school staffs in this state.

President-elect Dr. Roy W. Pearse; incoming president, Dr. Cecil G. Leitch; outgoing president, Dr. P. C. Hall, and secretary-treasurer, Dr. John F. Pearl.

The two day program consisted of four sessions: a symposium on "Neurology and Psychiatry," a symposium on "Medicine," a "General Scientific" session, and a symposium on "Surgery." At the close of each session a panel discussion by the participating speakers proved to be a fitting climax for that session. In all cases the panels were unable to complete discussion of the audience questions submitted during the time allotted. One of the outstanding features of the entire meeting was the good attendance at all sessions.

Sunday morning panel was moderated by Dr. Barney Finkel with panelists (l. to r.) Drs. Besseler, Sante, Wilson, Hess and Walsh.

Another factor, pleasantly noticed, was the interest shown by physicians in the exhibits which were displayed by the various companies.

The annual business session of the Academy was held from 9:00 a.m. to 10:00 a.m. on Saturday morning, November 5. At this session, new officers were elected as follow: Drs. Roy Pearse, Jr., Nevada, President-Elect; Kenneth Knabb, Springfield, Vice-President; A. J. Graves, Mount Vernon; Walter T. Gunn, St. Louis, and Edson C. Carrier, Kansas, elected to Board of Directors for three year terms. Drs. Charles O. Metz, St. Louis, and Roy Pearse, Jr., Nevada, were elected delegates to the American Academy of General Practice, and Drs. Barney Finkel, St. Louis, and Elvin Imes, Maryville, alternate delegates. Cecil G. Leitch, Blue Springs, takes over as President with the retiring President, P. C. Hall, St. Louis, assuming the position of Chairman of the Board of Directors. John F. Pearl, St. Clair, enters his third year as Secretary-Treasurer of an elected three year term.

Sunday afternoon panel was moderated by Dr. John F. Pearl with panelists (l. to r.) Drs. Bricker, Mayo, Keown and Dobyns.

It is interesting to note that the President-

Scientific sessions were well attended.

Elect, Roy Pearse, had a Grandfather, Herman E. Pearse, and an Uncle, E. Lee Miller, who were both Presidents of the Missouri State Medical Association.

At the Academy's annual banquet on Saturday night, November 5, President Hall presented the Academy's annual award for outstanding leadership in improving health care in Missouri to Conwell Carlson, medical science writer for the *Kansas City Star*. Carlson was honored for his contribution to greater public understanding of medicine and good health care through his many year of medical news reporting.

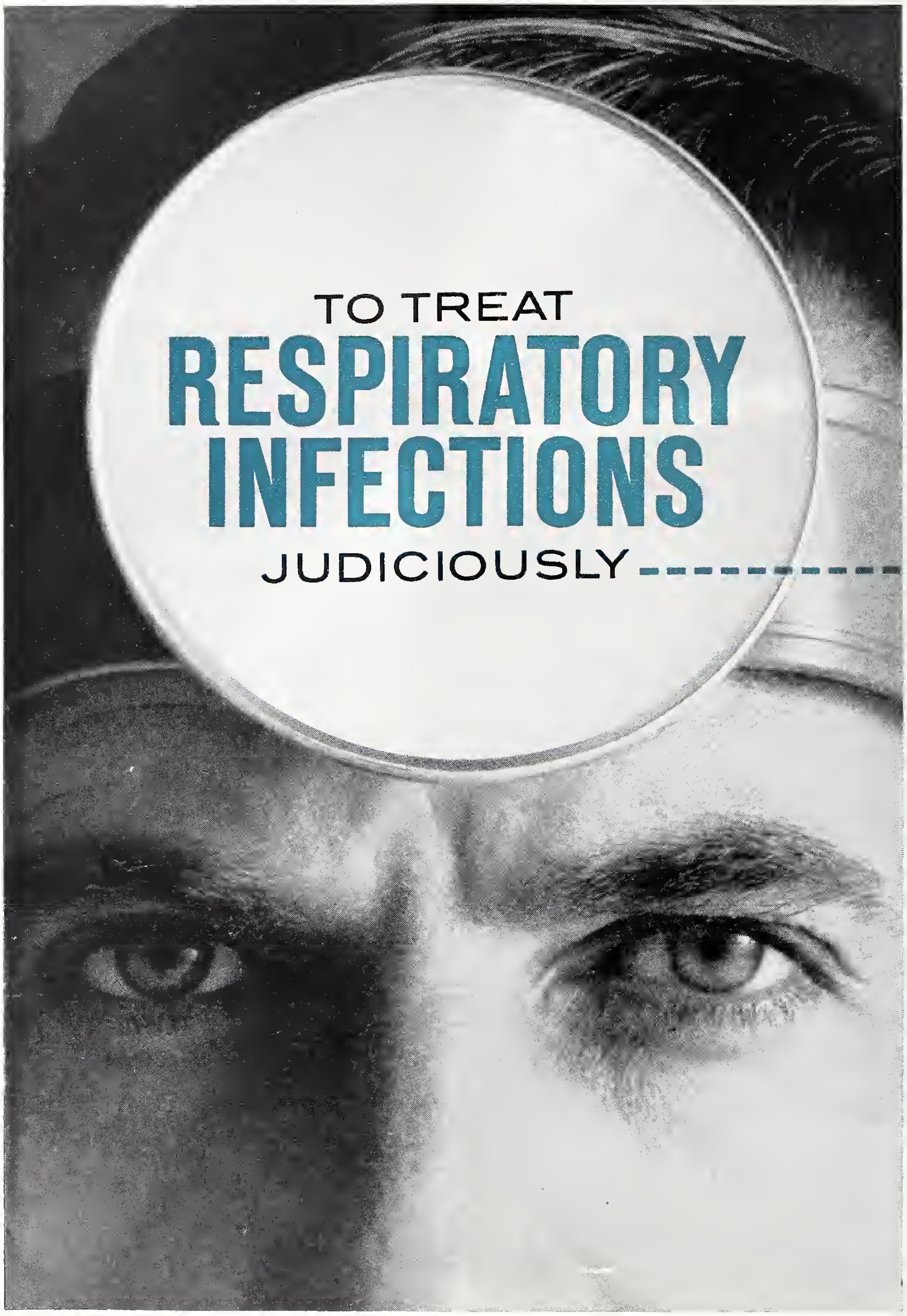
The banquet speaker was Mr. Chester Lauck, Houston, Texas, Executive Assistant of the Continental Oil Company, better known as "Lum" of the "Lum and Abner" radio and motion picture series. The tremendous applause at the end of his talk, and the many complimentary remarks following from the audience, were definite evidences of the excellent address he made. His discussion was built around the free enterprise system which has made this country great. He posed the question as to what our forefathers must think of us and the way we have dissipated our inheritance—those pioneers who came to these shores only a few generations ago and carved this civilization out of a wilderness. They came here seeking freedom and opportunity. They did not ask for old-age pension, workmen's compensation, social security, unemployment insurance, minimum hours, maximum wages. Come to think about it, they didn't ask for anything. They realized that their future and the future of their families was their own responsibility and not that of their government. Our job, he continued, is now to prove that we are of that same sturdy stock and we can do this only by assuming the responsibility of preserving the heritage they willed us. This, he said, is the eleventh hour.

Mr. Conwell Carlson of the *Kansas City Star* was presented a plaque by Dr. Hall.

Mr. Lauck, banquet speaker, was congratulated.

At the close of the banquet, Dr. P. C. Hall turned over the President's gavel to Dr. Cecil G. Leitch and pledged his support to the new president.

This two day scientific program is acceptable for 10 hours of Category I Credit by the American Academy of General Practice.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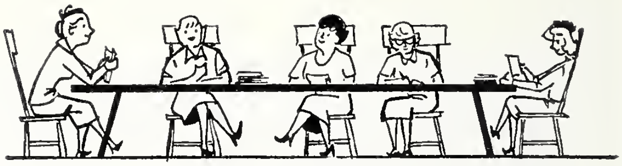
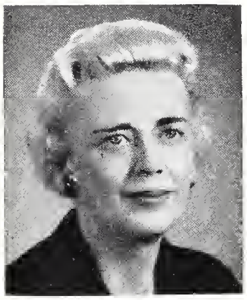


It is difficult to resist pausing to browse through the "contemporary" greeting cards when displayed in the stores. The other day I smiled at one such birthday card that carried a message something like this: "Don't be sad about having another birthday—remember how lucky you are. Why, just think—a year from now you will be one year older than you are today!"



Mrs. Jordan Kelling

The New Year always brings reflections of what the past year has held, and speculation as to what is in store during the next twelve months. We wonder if, like the birthday card, we might be telling ourselves, "Don't feel sad. Think how lucky we are. Next year at this time we may be well on the road to socialized medicine."

In Washington, D. C., on the eve of the annual fall meeting of the A.M.A., Dr. Ernest B. Howard, assistant Executive Vice-President of the American Medical Association urged organized medicine to "fight . . . with all our resources" any effort to have medical care for the aged financed through Social Security taxes. A campaign has been waged to destroy and discredit recently-enacted legislation under which medical care for the indigent aged would be provided by federal and state grants on a matching basis. Dr. Howard also said that many doctors are already incorrectly taking the view that legislation of the type advocated by Rep. Forand is inevitable and are beginning to think along lines of "how it (organized medicine) can live with such legislation."

The defeat of the Forand Bill in the past year meant the winning of one battle, but the war is far from won. In the first month of this new year the White House Conference on Aging is sure to result in much proposed legislation designed to make the government financially responsible for the health care of all the 10 per cent of our population who are over 65 years old, regardless of their need for such financing.

The Woman's Auxiliary to the A.M.A. has been praised and thanked for its help in defeating the Forand Bill. Yet, we have been told, the A.M.A. and its Auxiliary used only one tenth of its potential strength in this endeavour. Clearly, we must rally our forces one hundred per cent in the work that lies ahead.

Of all the poems written about the New Year, I like the lines of Tennyson best:

> Ring out, wild bells, to the wild sky,
> The flying cloud, the frosty light,
> The year is dying in the night;
> Ring out, wild bells, and let him die.
> Ring out the old, ring in the new,
> Ring, happy bells, across the snow:
> The year is going, let him go;
> Ring out the false, ring in the true.

I like these lines because they present a challenge, and stir up the courage to meet the challenge. They make one feel strong, and poised, and ready to do what one must do. We feel that we are ready to spread the truth, and so convince everyone, from the neighbor next door to the Congressmen in Washington that, in the words of A.M.A. President, Dr. Askey, "our policy position is in the best interest of all Americans, the aged included, and our willingness to defend this policy must be strengthened and maintained."

We had a lovely time playing official hostess to our A.M.A. Auxiliary President, Mrs. William Mackersie, of Detroit, at the Southern Medical Convention in St. Louis. Every Auxiliary member should have just such an opportunity to know Mrs. Mackersie, and her delightful wit, her keen intellect and her warm friendliness.

Two visits have been a delight in November—the trip to Nevada to meet with West Central Auxiliary, and the visit to the home of Esther Bauman in Maryville to meet with the Nodaway-Atchison-Gentry-Worth-Holt group. It is always most gratifying to feel the enthusiasm all the groups have for the Health Resources Directory which the State Auxiliary will compile for MSMA. Lafayette County is now working to complete the "pilot survey"—a trial run to see what problems may confront us in this project.

One year ago I wondered just what it would be like to be the state president. Now I know. I know that every member in the state has a part to play, and that countless members play their parts so grandly that it brings to your president a sense of humility that is not bitter, but sweet as honey. It is a wonderful year in a woman's life to serve you as State President.

Volume 58, Number 1—January, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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FRED L. NELSON, M.D., *St. Joseph*

The Use of Duografin in Diagnosing Intra-abdominal Masses

A Preliminary Report

The use of Duografin as an intravenous contrast medium is discussed and it is pointed out that, by means of delayed films, the colon may be studied as well as the renal and biliary tracts. A case report is presented.

Drs. Warres and Nelson are with the Thompson, Brumm & Knepper Clinic.

Duografin is registered by E. R. Squibb & Sons.

An intravenous contrast medium specifically designed for the simultaneous visualization of the renal and biliary tracts has been available for a few years. It is a combination of (3,5 diacetylamino-2,4,6-triiodobenzoate and methyl glucamine) (40 per cent Renografin) and (N,N′-adipyl-bis [3-amino-2,4,6-triiodo] benzoate methylglucamine) (20 per cent Cholografin) marketed under the proprietary name of Duografin.* We have found this preparation not only permits inspection of the renal and biliary excretory systems but, in delayed films, can be utilized in the study of the colon. The latter phenomenon has not previously been mentioned in the literature. Duografin, therefore, is particularly useful in the rapid preliminary identification of intra-abdominal lesions or masses. One case will be reported in detail since it is illustrative of those particularly suitable for the use of Duografin. Reproductions of roentgenograms of other cases are included.

Case Report

A 36 year old man was seen because of sudden onset of painless gross hematuria four days previously without any other urinary symptoms. History by systems disclosed discomfort in the right upper quadrant of the abdomen if certain foods were eaten. Six years previously the patient had been treated for pyuria. Excretory urography at that time was normal.

Physical examination revealed a firm ballotable mass in the right upper abdominal quadrant. A right varicocele was present. Blood count was as follows: Hemoglobin 9.4 gms.; red blood cells 3.51 million; white blood cells 5,000. Urinalysis was as follows: Specific gravity 1.015; pH 6.5; albumin 1 plus; sugar negative; macroscopic blood: fifteen to twenty white blood cells.

Flat plate of the abdomen demonstrated an enlarged right renal shadow. Duografin was administered and dye appeared promptly in five minutes from both kidneys. The left renal calyces, infundibuli, pelvis and ureter were normal. On the right, the collecting system was displaced superiorly with marked distortion of the calyces. At 75 minutes there was normal concentration of dye in the gallbladder and the common duct was well outlined without any filling defect. Following a fatty meal there was contraction of the gallbladder. Four hours later cystoscopy disclosed a normal urinary bladder.

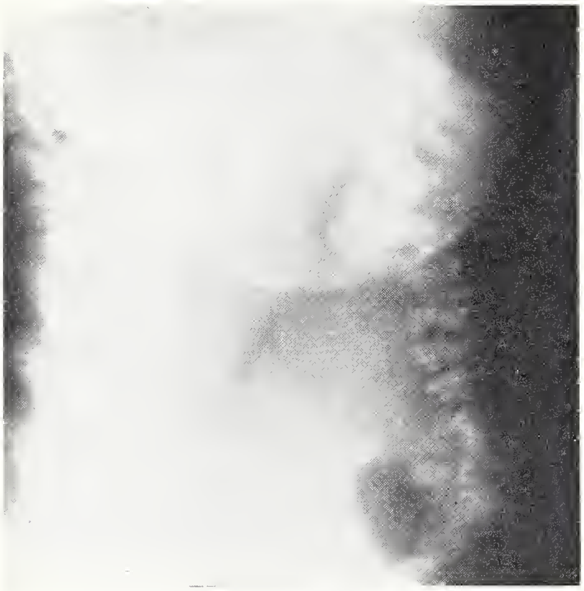

Fig. 1. Case 1. A large right renal tumor displaces the colon anterolaterally.

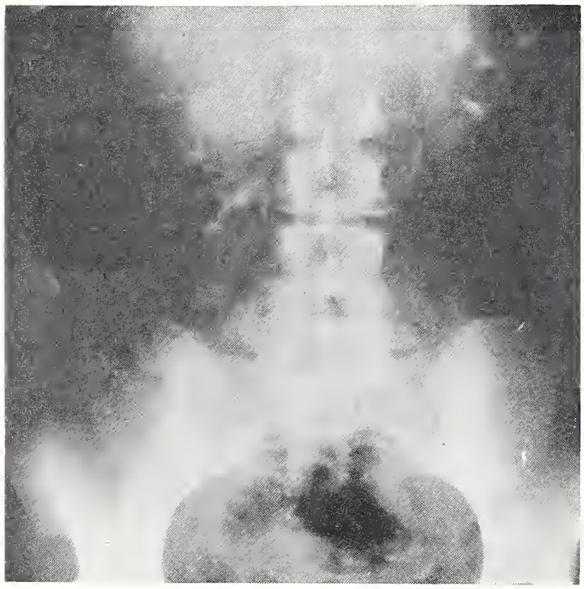

Fig. 2. Case 2. Normal cholecystogram and urogram.

Retrograde pyelography confirmed the intravenous urographic findings. Dye had advanced to the ascending colon and hepatic flexure. Oblique views demonstrated the kidney to be displacing the colon markedly anteriorly and somewhat laterally. Chest x-ray showed a healthy chest.

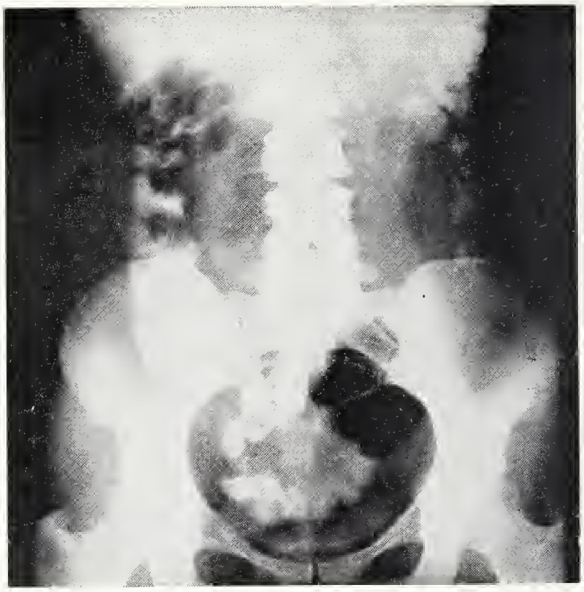

Fig. 3. Case 2. Normal colon.

Five days later a radical right nephrectomy was done through a dorsolumbar extra-pleural approach. Because the inferior vena cava was invaded, it was opened and the tumor thrombus removed. The kidney weighed 950 gms. Pathologic diagnosis was carcinoma of the kidney. Postoperatively the patient was given four intravenous injections of 8 milligrams nitrogen mustard each. He was also given a course

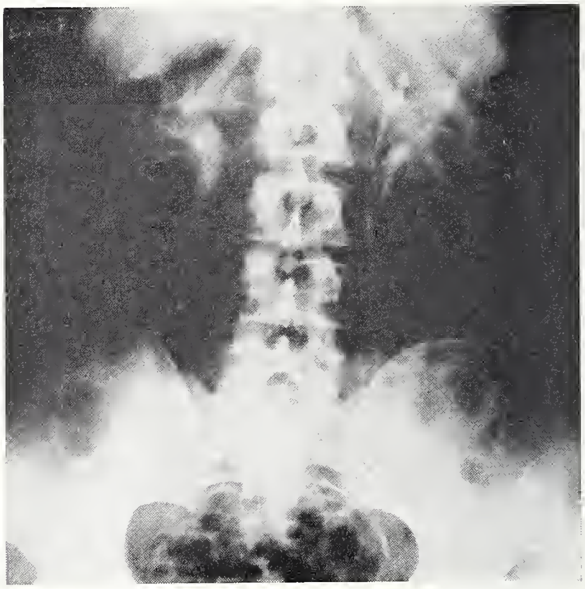

Fig. 4. Case 3. Double left kidney.

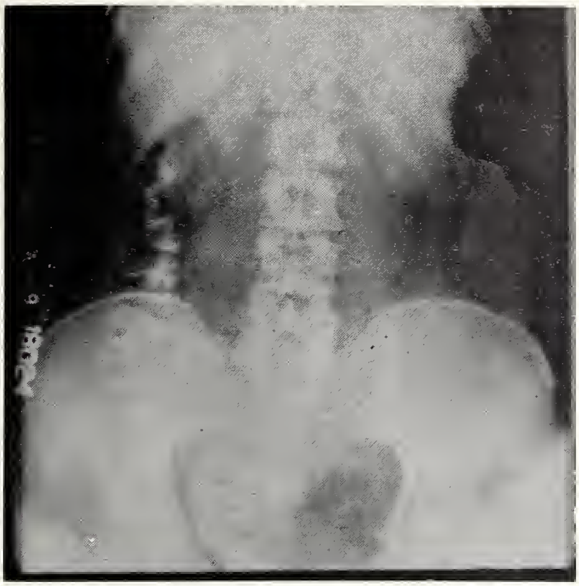

Fig. 5. Case 3. Dye appears in a segment of ascending colon as a moving bolus.

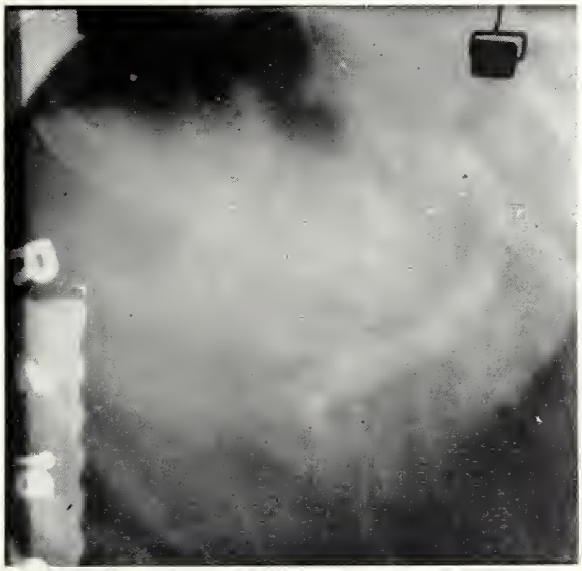

Fig. 6. Case 4. Nonopaque calculi in the common duct and gallbladder.

of deep x-ray therapy. Ten months postoperatively the patient apparently is doing well.

Comment

Renografin is rapidly excreted by the kidneys following intravenous administration, producing opacification within 5 to 15 minutes. Cholografin is secreted by the liver, permitting visualization of the hepatic and common bile ducts within 25 minutes after injection. The gallbladder reaches maximum opacification within one to two and one-half hours.

Ninety per cent of Cholografin is excreted into the gastrointestinal tract and eliminated in the feces. Because of this, the entire colon becomes outlined in some patients. In others, the Cholografin remains localized as a moving bolus; but by proper timing the entire colon can be visualized. We have found films at four and six hour intervals to be most satisfactory. When indicated, spatial relationships can be further demonstrated by the repeated injection of 30 per cent Renografin and the taking of oblique and lateral views.

In the thirty patients of this preliminary study, adequate amounts of dye were present in the colon in all except one. This patient had a stone in the common bile duct. It has been recommended to the manufacturer that better colon films would be obtained if the Cholografin portion of the preparation was increased. It is contemplated that additional studies will be done with the newer preparation.

The major side effects of this combination was flushing, nausea and vomiting, and occasionally diarrhea. These effects are primarily due to the Cholografin portion of the Duografin.

Duografin is recommended for rapid preliminary studies and not to replace or supercede retrograde pyelography or barium enema colon studies. The intravenous study of the hepatic and common ducts and the gallbladder, however, is superior to that obtained by the routine oral preparations.

Summary

Duografin is a preparation permitting rapid preliminary identification of lesions and masses involving the renal and biliary systems. By means of delayed films, the colon may also be studied.

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DANIEL B. LANDAU, M.D., *Hannibal*

Hyaline Membrane Disease

Its Prophylaxis and Treatment

That hyaline membrane disease and posthemorrhagic shock of the newborn infant are different degrees of the same basic pathologic physiology is suggested; also that treatment should be adequate blood transfusion to restore blood volume to a safe level, using venous pressure values as a guide, is presented. Case reports illustrating this approach to treatment of hyaline membrane disease are presented.

To THOSE especially interested in newborn infant mortality it is evident that there is a multiplicity of articles[1, 12] dealing with posthemorrhagic shock of the newborn infant, hyaline membrane disease and the respiratory distress syndrome. Each of these entities is now in an era of emphasis.

Posthemorrhagic shock of the newborn infant is often considered with the syndrome described by Wiener and substantiated[1, 5] by others, of a defect on the maternal side of the placenta leading to fetal hemorrhage into the maternal circulation.

Hyaline membrane disease and the respiratory distress syndrome are considered together as they are synonymous terms. The clinical picture is designated as the respiratory distress syndrome and hyaline membrane disease is its pathologic counterpart. Many authorities feel that an absolute diagnosis of hyaline membrane disease can be made only by an examination of microscopic lung preparations.[13] It is now generally agreed that hyaline membrane disease can be diagnosed clinically[14] and radiologically.[15] The terms hyaline membrane disease and the respiratory distress syndrome are used interchangeably in this discussion.

Post hemorrhagic shock of the newborn infant when recognized early[1] often has a favorable outcome if treated promptly and adequately.[3] This cannot be said for hyaline membrane disease.

Hyaline membrane disease has been ascribed to many different etiologies and has had a number of different types of treatment.[16] From the results of these various types of treatment the pessimism regarding prognosis is easily understood.

Apgar[18] has given criteria for the early recognition of distress by appraisal of the newborn infant immediately following birth. Silverman and Anderson[19] have done likewise. Miller's[6, 7] studies[17] have been especially valuable by enabling judgment of prognosis.

Immediately following birth during the changeover from the fetal to the newborn state, changes are initiated which convert the fetal[20] circulation to a circulation of the mature type. Under normal conditions lung expansion begins, the foramen ovale closes functionally and there is a reversal of blood flow through the ductus arteriosus whereby blood flows from the aorta to the pulmonary artery. This is instrumental in bringing a greater blood flow into the lungs. Jäykkä believes[21] that this increased blood flow with the resulting distention of the pulmonary capillaries in intimate contact with the alveoli is an important factor in lung expansion. Jäykkä's theory has caused much discussion.[22]

Because of the characteristic pathologic lung findings in hyaline membrane disease the lungs have received the most attention.[23] Some believe that the membrane can be completely and satisfactorily explained on the basis of aspirated amniotic fluid. Others feel that it arises from capillary alveolar transudate. A more recent concept favors capillary fragility with fluid shift into the alveoli whereby the thromboplastin of the amniotic fluid interacts with fibrinogen of the plasma to form the fibrin membrane characteristic of hyaline membrane disease.[12]

Evidence is now accumulating that the circulatory system has not received the attention that it deserves despite the fact that the possible association of cardiac failure with the respiratory distress syndrome has been considered for a number of years.[23] Personal observations of several infants with mild types of the distress syndrome who recovered have revealed the presence of transitory murmurs. These murmurs became fainter as recovery progressed and they subsequently disappeared.

Characteristic ausculatory and electrocardiographic changes have been described as occurring during the change-over from the fetal to the mature type of circulation. Rowe[24] reports ausculatory and electrocardiographic reversion to the fetal pattern if respiratory distress occurs.

James[23] has pointed out that many of the physiological measurements and determinations as well as the expiratory grunt so characteristic of the respiratory distress syndrome resemble the findings in adults suffering from cardiac failure.

James and Rowe[25] in their studies on the effects of hypoxia during the neonatal period found that if the neonatal circulatory adjustments involving the lungs and the ductus arteriosus have taken place that the response to hypoxia corresponds to that in the older child or in the adult. They found that if the adjustment is incomplete a short period of hypoxia may produce a profound change in the circulatory dynamics so that venous blood may bypass the lungs at both the foramen ovale and ductus arteriosus levels, a return to the fetal type of circulation.

The studies of Lind and Wegelius[26] also show that deterioration of the newborn infant's condition leads to a return to the fetal type of circulation.

Lendrum[27] is of the opinion that the clinical and pathologic findings in the newborn premature infant with hyaline membrane disease are manifestations of left-heart failure.

Dawes[28] has expressed the opinion that the hyaline membrane syndrome is the result of cardiac failure leading to increased pulmonary pressure with transudation from these capillaries into the alveoli and finally to typical hyaline membrane formation.

Sutherland et al.[29] reporting their observations on leg volume changes in hyaline membrane disease comment on the possibility that there is a fluid shift from vascular to extravascular compartments. The similarity of this to the fluid shift occurring with heart failure is apparent and lends support to the theory that hyaline membranes come in part from within the body rather than from aspiration.

Considering these facts it is easy to agree with Gruenwald that the hyaline membrane is an "eosinophilic red herring."[11, 12] The focusing of attention on this "red herring" and ignoring the underlying reasons for its production undoubtedly has delayed the finding of the solution to this problem.

Assuming that heart failure is a basic finding in hyaline membrane disease why should it be so prevalent in the newborn period, especially in section and premature infants?

Normally 50[30] to 100 ml.[12] of blood enter the infant in about 45 seconds as the uterus clamps down immediately following delivery. It has been found that even a brief delay in clamping the cord may result in a significant transfusion. Infants delivered by section when uterine contractions are lacking do not receive their full share of placental blood unless special efforts are made in this direction.[31]

The proportion of blood in the placenta to blood in the infant is greater the earlier the period of gestation.[22] Consequently the more premature the infant is at birth the less blood volume it has compared with the blood in the placenta. The immediate clamping and cutting of the cord as is so often customary in dealing with premature infants in order to hasten the infant to the warmth of the incubator and to enable the obstetrician to devote his attention to the mother may thus deprive the premature infant of a significant amount of blood.[32]

In addition to the premature infant and the section infant who are especially susceptible to hyaline membrane disease this condition is also of frequent occurrence in deliveries complicated by placenta previa, cord around the neck or shoulder, abruptio placenta and erythroblastosis.[8] The common associated factor in this group is early separation of the infant from its placental blood supply.[32]

The suggestion is made that low blood volume shock is the underlying factor in hyaline membrane disease and that the associated cardiac failure is the result of the shock syndrome modified by the labile structure and the functional incapacity of the neonate's cardiovascular system. This hypothesis embraces the idea that posthemorrhagic shock of the newborn infant and the hyaline membrane syndrome are one and the same condition. They are considered to be different phases of the same underlying pathologic physiology.

If the blood loss is profound the infant has the symptoms and findings of posthemorrhagic shock and the diagnosis is often obvious at birth.[1, 3, 4, 5] The symptoms include pallor, listlessness and a weak cry. Immediate adequate blood transfusion is the accepted treatment for this condition.

If the blood loss is to a lesser degree the infant presents the symptoms and findings of the respiratory distress syndrome or hyaline membrane disease.[32] The usual description of this infant is that he appears to be normal at birth and that he seems normal for the first hour or two. Close observation of the infant in who the distress syndrome is anticipated belies this description.[33] Many of these infants have a low Apgar[18] score at birth and then seem to improve before precipitously showing showing distress. Symptoms include dyspnea, cyanosis, labored respirations with sternal retraction and tachypnea. The course is often rapidly downhill and many of these babies die within 18 to 24 hours. Some live 48 hours or longer but the mortality rate is high.

Sisson[34] has reported low blood volumes in the group with the respiratory distress syndrome. Wiener[2] states that the hemoglobin, cell volumes and red cell counts do not always mirror the true blood picture and that these values may appear normal as the result of hemorrhage while actually there is an insufficient blood volume circulating in the vascular system. My own observations of these infants are in agreement with Wiener's comments.

Neligan[35] has shown that the systolic blood pressure in these infants may drop to shock levels in the first half hour of life. It has been suggested that this represents the pathologic physiologic state initiating pulmonary hyaline membrane disease.[36]

Rudolph[37] and his colleagues by cardiac catheterization studies on 11 infants in severe respiratory distress found marked systemic and pulmonary hypotension. Eight of this group died and showed extensive hyaline membrane disease at autopsy. A widely patent ductus arteriosus with an accompanying left to right shunt was also reported in these infants. This is in keeping with previously reported observations[24] and represents a return to the fetal type of circulation in the deteriorating distressed infant.[25]

TABLE 1

POSTHEMORRHAGIC SHOCK AND HYALINE MEMBRANE DISEASE

Blood Loss

A. Section infant
B. Premature infant
C. Placenta previa
D. Abruptio placenta
E. Other conditions leading to early separation of infant from its placental blood supply

Hypovolemia

A. Posthemorrhagic Shock (Immediate)
  1. Immediately recognizable
    (a) Extreme pallor
    (b) Listlessness
    (c) Weak cry
    (d) Respirations irregular and gasping
B. Hematogenic Shock (Delayed Shock)
  1. Apparent Latent Period
  2. Sudden Onset
    (a) Cyanosis
    (b) Dyspnea
    (c) Tachypnea
    (d) Labored respiration with sternal retraction.

Lendrum[36] in commenting on the findings in the report by Rudolph et al stated that hypovolemia could well explain the reported findings.

Summing up the probable course of events one has blood loss as the primary factor. This leads to the shock syndrome which occurs in two main forms. The first, and most readily apparent, is posthemorrhagic shock of the newborn infant. This is usually readily recognizable immediately following birth. Shock[1] and anemia[3, 4, 5] are the outstanding findings. The second form of the shock syndrome appears as delayed shock. This is considered to be the result of blood loss to a lesser degree but beyond the critical level required to maintain circulation.[32] The classical signs and symptoms of hyaline membrane disease or the respiratory distress syndrome become apparent.

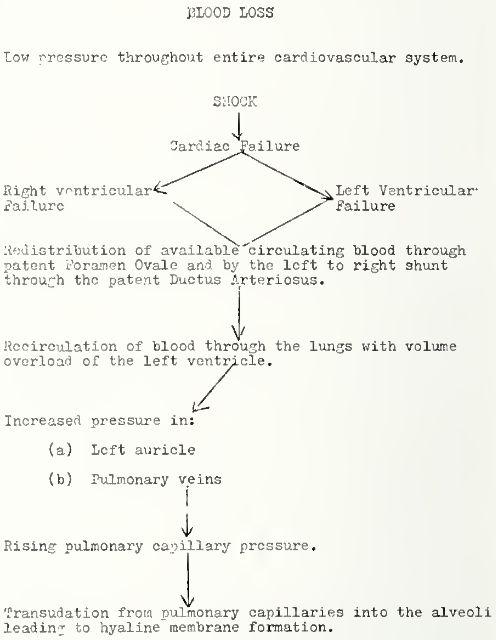
BLOOD LOSS
Low pressure throughout entire cardiovascular system.
SHOCK
Cardiac Failure
Right ventricular Failure
Left Ventricular Failure
Redistribution of available circulating blood through patent Foramen Ovale and by the left to right shunt through the patent Ductus Arteriosus.
Recirculation of blood through the lungs with volume overload of the left ventricle.
Increased pressure in:
(a) Left auricle
(b) Pulmonary veins
Rising pulmonary capillary pressure.
Transudation from pulmonary capillaries into the alveoli leading to hyaline membrane formation.

Diagram 2.

As shock progresses there is cardiac failure, transudation of fluid from the pulmonary capillaries into the alveoli from which the hyaline membrane is formed.[12, 27]

It seems worthwhile to emphasize again that reduced blood volume or hypovolemia is considered to be the basic pathologic physiology common to posthemorrhagic shock and hyaline membrane disease. It is also stressed that hyaline membrane disease is found most often in those infants who are separated from their placental blood supply the earliest.[30, 31]

These ideas have been expressed previously and form the basis of the treatment of the infants in the following case reports.

CASE REPORTS

Two representative examples are herewith described, both of whom have been treated since the last published report.[32] The third example is included (it has previously been reported) as it is considered to illustrate phases of both the posthemorrhagic shock syndrome and hyaline membrane disease which as previously stated are considered to be variants of the same underlying abnormal physiology.

Case 1. Baby J. M. C. Section infant. Indication for section was persistent transverse position of more than five weeks' duration. Estimated date of confinement was 34 weeks.

There were two episodes of considerable bleeding and several episodes of slight bleeding extending over a period of several weeks.

Diagnosis: Partial separation of the placenta.

The infant was delivered at 8:58 a.m. On incising of the uterus the placenta was found directly under the incision (placenta previa cesarea of De Lee). On extricating the infant there was considerable blood loss from the placenta. The infant had a considerable amount of blood in the pharynx. The placenta was suspended in the usual manner. There were occasional gasps and the resuscitator was applied at 9:01 a.m. At 9:05 regular respirations were established. Nine ml. were obtained by gastric suction; 8 ml. were recovered from the severed end of the umbilical cord.

After respirations were established the color was good and the general condition appeared good. The cry was strong. Because of the history of two episodes of considerable bleeding prior to section and as placenta previa cesarea was found the infant was considered a likely candidate for the hematogenic shock syndrome. He was typed and cross matched. Weight at birth was 5 lbs., 3 oz.

Shortly after being placed into the Isolette the infant developed a pallid cyanosis and sternal retraction was evident. The respirations were accompanied by moaning and grunting.

The diagnosis of the hematogenic shock syndrome was made despite the hemoglobin of 18 gm. and red cell count of 5,320,000.

A portable chest film was made just prior to the transfusion and showed areas of patchy atelectasis.

Blood transfusion through the umbilical vein was started at 11:10 a.m. and finished at 11:23 a.m.; 32 ml. blood were given.

Venous pressure at the onset of the procedure was 0. Venous pressure after 20 ml. had been given and after 25 ml. had been given were identical; between 1 and 2 cm. Venous pressure at the conclusion of the procedure or after 32 ml. had been given was 3.5 cm.

His color had improved considerably and he was returned to the Isolette.

At 14 hours of age his condition was improved. The respiratory rate varied from 54 to 78. There was still considerable sternal retraction but there was less struggling. There was no cyanosis.

Twenty-four hours following delivery the respirations were still quite rapid. The rates were variable, at times being as high as 80. Considerable rib retraction was still present. The color remained pink. For a short time the skin appeared less ruddy than formerly but at no time was there recognizable cyanosis. The breath sounds did not come through well in any area. Portable x-ray findings were as previously reported. Hgb. was 15.2 gm. and red cell count 4,000,000.

On October 10, at 48 hours of age he showed considerable improvement. There was much less sternal retraction and but little rib retraction. He cried vigorously as he moved about. His color was good. Hgb. was 16.8 gm. and red cell count 5,000,000.

Improvement thereafter was rapid and steady. He was dismissed at 18 days of age. His subsequent physical and developmental progress have been excellent.

Case 2. Baby boy D. L. H. Delivered by Dr. Francis R. Burns at 12:45 p.m. on September 16, 1959.

Estimated date of confinement was 33 weeks.

The infant had the cord about the neck but the cord was not cut early. It was felt that the infant received as much of the placental blood as it was possible for him to receive. Dr. Burns stated that because of the cord about the neck there was some difficulty in aspirating the fluid from the pharynx. There was a mild abruptio; it was Dr. Burns' opinion that the loss of blood was slight.

Following birth the infant was a bit slow in establishing regular respirations. Weight at birth was 3 lbs., 15½ oz.

At 2:45 p.m. there was sudden onset of rapid respirations, chest retraction began and grunting was noticeable. Slight cyanosis was present. The respiratory rate varied from 60 to 65.

Physical examination, limited because of the infant's condition, showed heart sounds to be of good quality. No murmurs were present. Breath sounds were diminished in all lung fields. No rales were present. No mediastinal shift was found.

Red blood cell count was 4,600,000, and Hgb. 14.2 gm.

Because of (1) tachypnea, cyanosis and labored respirations, (2) abruptio placenta, and (3) relative anemia it was felt that the infant was suffering from the hematogenic shock syndrome and that a blood transfusion was indicated.

Transfusion was started at 3:56 p.m.

Venous pressure at the beginning of the transfusion was less than 2 cm. At 4:02 p.m. venous pressure was 3.5 cm. after 10 cc. blood had been given; at 4:06 p.m. 4.5 cm. after 15 ml.; at 4:09 p.m. 4.75 cm. after 20 ml.; at 4:12 p.m. 3.75 cm. after 22 ml., and at 4:15 p.m. 5.00 cm. after 24 ml.

Twenty-four ml. blood were given using as a basis 6 ml. per pound of body weight and guided by the venous pressure response.

At the end of the procedure the respirations were still rapid but there was less retraction and the color was improved. The lips were pink and the skin was pink.

The infant was returned to the Isolette. Oxygen was continued. It had been given throughout the transfusion.

Chest film prior to transfusion as interpreted by Dr. Lysle Bach, radiologist, showed a large amount of unexpanded lung tissue present, especially in the right lung and in the basilar portion of the left lung.

Chest film at about 21 hours of life, on September 17, showed almost complete expansion of the left lung and the upper portion of the right lung. The only area that was still suggestive of incomplete expansion was in the region of the right middle lobe.

Chest film on September 20 at about 96 hours of age was considered normal by Dr. Bach.

Respirations on September 16 varied from 56 to 80, and on consecutive subsequent days from 42 to 64, 48 to 64, 36 to 50 and 34 to 48.

There was a period of apnea on September 20 with immediate response to external stimulation of 0.2 cc. caffein.

Dismissal was on September 31 with weight at 5 lbs., 12 oz.

At 2½ months of age the infant seemed more jumpy and jittery than normal. This lasted for just a few days. Subsequent physical and developmental progress have been entirely satisfactory.

Case 3. Baby girl D. W. Delivered at 10:57 a.m. by emergency section because of severe hemorrhage. The mother was brought by ambulance from the home 50 miles distant. The bleeding was so severe and the mother so obviously shocked that the surgeons had insufficient time to scrub properly.

One third of the placenta had separated and a large infarct was present at the periphery.

Birth weight was 3 lbs., 12 oz. and infant was pale and flaccid. She had little spontaneous movement. The heart tones were fair. The femoral pulsations were palpable but weak. The umbilical cord was short. Gastric suction yielded 1 ml. Umbilical cord collapsed in 5 minutes. Four ml. were recovered from the severed end of the umbilical cord.

The infant's condition was poor. There was marked xipoid retraction and it seemed as though the lower portion of the sternum almost touched the vertebral column. There was marked pallor but no cyanosis.

Impression was (1) hematogenic shock (posthemorrhagic shock), (2) anoxia, (3) anemia, Hgb. 11.6 gm., red cell count 3,500,000.

Because of shock and anemia a blood transfusion was felt to be necessary.

Blood transfusion was started at 12:06 p.m. and finished at 12:20 p.m. with 26 ml. given. Venous pressures were not determined. Site of transfusion was the umbilical vein.

At the end of the transfusion the color was improved. Chest retractions were still present but the struggling was less marked and the heart tones were good. At 4:00 p.m. on the date of birth Hgb. was 10.7 gm. and the red cell count was 3,680,000.

On the following morning the infant's condition was still precarious. The sternal retraction was much less and the color was good. The cry was strong on stimulation and at times without stimulation. The heart tones were distant and the rhythm was regular.

There were scattered clicks in both lungs, and the hands and feet were edematous. Impression was that the child was improved but the prognosis was still guarded. Respirations continued to be rapid for the next 72 hours.

The progress was slow but after the first few days it was fairly steady.

The infant was dismissed at 46 days of age with Hgb. 8.3 gm., red cell count 3,220,000 and weight was 5 lbs., 5½ oz.

The subsequent course has shown considerable developmental retardation in the motor and adaptative spheres. At 14 months of age the developmental progress was less than that of a child of 6 months. She has since been enrolled in a cerebral palsy clinic.

Interpretation is that this represents posthemorrhagic shock or hematogenic shock with abnormal pulmonary ventilation and the clinical signs of hyaline membrane disease. Unfortunately x-rays of the chest were not made.

The abnormal pulmonary ventilation and posthemorrhagic shock were successfully treated by blood transfusion but the cerebral anoxia was of too long duration to prevent permanent brain damage.

CONCLUSIONS

1. Evidence has been presented suggesting that hyaline membrane disease and posthemorrhagic shock of the newborn infant are different degrees of the same basic pathologic physiology.

2. The diagnosis of posthemorrhagic shock is often obvious at birth. Its treatment is immediate adequate blood transfusion.

3. Hyaline membrane disease usually manifests its shock origin more subtly but just as definitely. Its presenting symptoms are those of delayed shock.

4. The symptoms of shock in the newborn in-

TABLE 2

REVIEW OF THREE CASES

Infant	*Weeks Gestation*	*A. Type of Delivery* *B. Complication*	*Weight*	*Age at Onset of Symptoms*	*Presenting Symptoms & Respiratory Rate*	*X-Ray Findings*	*Venous Pressures*	*Hgb., RBC*	*Treatment (Blood Transfusion)*	*Results*
D. L. H.	33	A. Vaginal B. Mild Abruptio Cord about neck	3 lbs. 15½ oz.	2 hours	Tachypnea Cyanosis Sternal retraction Grunting respirations	Atelectasis	At start of transfusion less than 2 cm. 10 ml.—3.5 cm. 15 ml.—4.5 cm. 20 ml.—4.75 cm. 22 ml.—3.75 cm. 24 ml.—5 cm.	Before transfusion on 9-16-59 14.2 gm. 4,600,000 9-17-59 19.8 gm. 5,420,000	24 ml.	Normal growth and normal developmental progress
J. C.	34	A. Section B. Premature separation of placenta	5 lbs. 3 oz.	Approx. 60-90 minutes	Pallid cyanosis Sternal retraction Twitching, moaning, Whining, cry. Tachypnea 1st 24 hrs. 54-78 consid. variation 2nd 24 hrs. 48-80 consid. variation 3rd 24 hrs. 54-65 consid. variation 4th 24 hrs. 40-65	Patchy Atelectasis 10-8-58 10-9-58 no change 10-11-58 marked improvement since last study	0 at onset of transfusion 3.5 cm. at conclusion	10-17-59 11.4 gm. 3,440,000 18 gm. 5.33 million 24 hrs. 15.2 gm. 5,000,000	32 ml.	Excellent physical developmental progress
D. W.	31	A. Section B. Premature separation of placenta	3 lbs. 12 oz.	At birth	Shock, pallor, flaccidity, marked chest retraction	Not determined	Not determined	11.6 gm. 3,500,000	26 ml.	Survived Cerebral Palsy Mental Retardation

fant differ from those in the older organism because of the transitional state of the newborn infant's cardiovascular system.

5. The early symptoms and findings of hyaline membrane disease, when recognized as being of shock origin, can often be successfully treated by restoration of blood volume to a safe level using venous pressure values as a guide.

6. Case reports have been presented which illustrate this approach to the problem of the treatment of hyaline membrane disease.

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Double Benign Strictures of the Esophagus Following Subtotal Gastric Resection

Report of a Case

Several theories of the etiology of benign stricture of the esophagus are presented. A case in which two separate levels of the esophagus were involved by benign stricture is presented.

Dr. Manganaro is a graduate of Creighton University School of Medicine, Omaha, and restricts his practice to internal medicine.

THIS CASE REPORT presents the problem of stenosis at two separate levels in the esophagus. In the numerous articles reviewed, I could find no mention of two separate areas of stricture, though some presented cases of diffuse separate areas of stricture involving a segment as long as one third or more of the esophagus. It is also of interest because the effective dilatations were done by a relatively simple technic on an outpatient basis. It is of further interest because the strictures developed after subtotal gastric resection. As will be brought out in the discussion, this procedure has been recommended as a method of treatment for esophageal strictures.

CASE REPORT

Mr. E. B., a 41 year old white mechanic, was referred on July 13, 1957, with the following history. On January 9, 1957, he was admitted to a hospital because of epigastric pain and vomiting of three days duration. The data obtained from the record of this hospitalization follows: The physical examination was recorded as essentially normal except for vomiting, retching and epigastric tenderness. Laboratory examinations were limited to routine blood count, urinalysis, VDRL and blood diastase. These were negative except for a white blood count of 16,000, with 14 stabs, 83 segmented neutrophils and three lymphocytes. Oral intake was withheld. An intravenous cholecystogram was done on the day after admission and was interpreted as normal. X-ray examination of the esophagus, stomach and duodenum was reported as showing a large ulcer of the second portion of the duodenum and "duodenitis of the third and fourth portions."

The patient became markedly agitated and developed paranoid ideas. A consulting psychiatrist felt that the patient had both paranoid and depressed aspects of a psychoneurosis which made the organic complaints worse. The patient was transferred to another hospital with facilities for psychiatric care. Subsequently, he was subjected to a subtotal gastric resection.

The patient said that a nasogastric suction tube was used for three days after the surgery was performed. He also stated that he noted dysphagia almost immediately after he was allowed to eat and that the dysphagia persisted. He had little trouble with fluids or soft foods after his discharge from the hospital. However, he almost always had trouble swallowing bread or meat because "they stick halfway down."

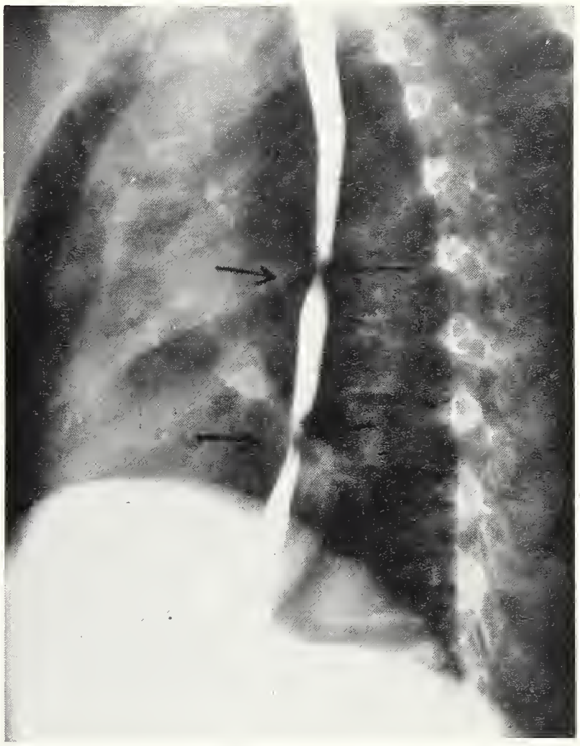

Fig. 1. X-ray of the two strictures before dilatation.

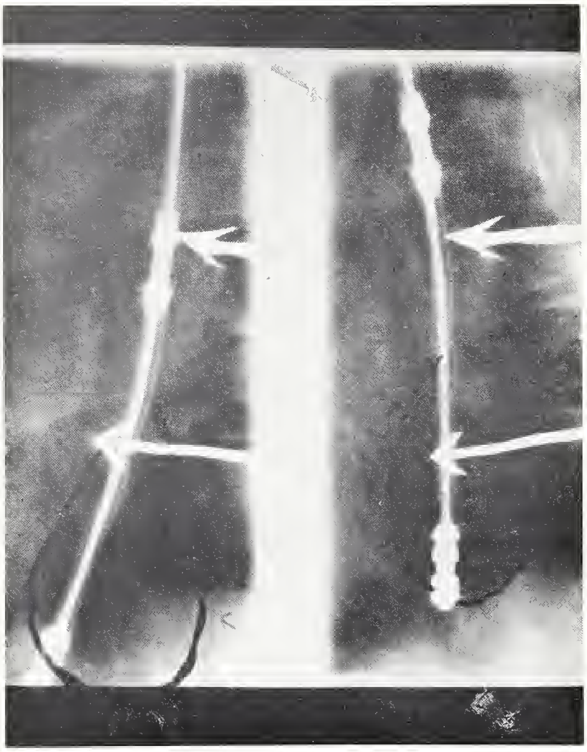

Fig. 2. An Einhorn dilator with the balloon distended to a diameter of about 3.5 cm. at the lower stricture.

X-ray examination of the esophagus was done as an outpatient. The radiologist's report was as follows: "There are two areas of constriction in the esophagus. They are persistently demonstrated at fluoroscopy and on numerous spot films. One is at the level of the fifth dorsal body, the other at the level of the seventh intervertebral disk. They have the appearance of inflammatory strictures, having a caliber of about 5 mm. There is a high gastric resection with functioning gastrojejunostomy." Figure 1 shows the x-ray appearance of the two strictures before dilatation as described by the radiologist.

On July 17, 1957, the patient was hospitalized by me primarily for esophagoscopic examination. An Eder Flexi-rigid esophagoscope was used and was passed easily. At about the midesophagus, there was rather marked narrowing. The mucosa was smooth and pale proximally, but distally it was injected. The walls of the esophagus were quite rigid at the proximal end of the stenosis and the scope could not be passed further. The proximal stricture was dilated with olive tip bougies ranging from size 24F through 30F.

The patient was seen in the office on July 22, 1957, and was gratified with the results of the first dilatation, stating he had dysphagia only twice. The next visit to the office was on August 10, 1957. He gained 1½ pounds but he stated that "now the food, mostly meat, sticks in two places." He was able to point precisely to the two levels of stenosis.

On August 21, 1957, he was dilated again. This time an Einhorn Cardiospasm Dilator was used with the help of the radiologist under fluoroscopic control. The two levels of stricture were marked by lead arrows taped to the chest wall. The dilator has a metal tip and the balloon around it can be precisely placed under fluoroscopy. The balloon was dilated forcefully three times, each time forcefully enough so that it produced considerable pain to the patient. This appears to be necessary for successful dilatation since the pathology is primarily that of inflammation and replacement fibrosis in the submucosa and the muscular layer. Only dilatation forceful enough to produce pain will rupture the fibrous tissue. This is the same rational advocated by Schindler[1] in the successful treatment of achalasia of the esophagus. The procedure was repeated on August 30, 1957.

Figure 2 shows the Einhorn Dilator with the balloon distended to a diameter of about 3.5 cm. at the lower stricture. At the upper stricture, the balloon was able to be distended to a diameter of 2 cm. Barium swallow after this dilatation was reported by the radiologist as follows: "Barium swallow after the dilatation reveals good peristalsis through both areas of constriction, with the lumen of the esophagus dilating to 1.5 cm. (as wide as the rest of the esophagus) at the upper constriction and about 8 mm. at the lower constriction. At fluoroscopy, the lower constriction was dilated even more than this, but this is the measurement on the radiograph made with the spot film device."

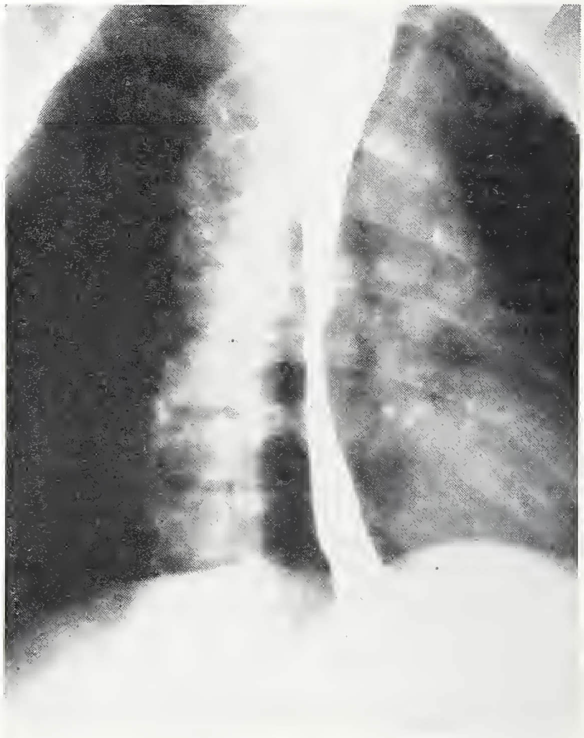

Fig. 3. Examination on May 23, 1958, showed the lower stricture no longer identified.

The patient then experienced no further difficulty in eating. He was reexamined on May 23, 1958. Barium swallow revealed that thick barium passed readily down the esophagus and into the remaining portion of the stomach. There was good peristalsis. There was slight intermittent spasm at the uppermost stenotic area, but the lower stricture could no longer be identified (fig. 3). Dilatation was again repeated in the manner noted above.

Figure 4 shows radiographs taken on April 9, 1959. The strictures are no longer present, and fluoroscopic study showed the esophagus to distend and contract readily with normal peristalis.

DISCUSSION

Except for webs and strictures resulting from ingestion of lye or other corrosive substances, the cause of benign stricture of the esophagus is still under active discussion in the literature. Benedict[2] states that all cases of benign stricture of the esophagus have an associated esophagitis. MacLean and Wangensteen[3] advocate that stenosis of the esophagus is due to peptic esophagitis alone, or combined with prolonged vomiting. They reported 19 cases in which gastroduodenal surgery was done for relief of esophageal stricture. Six had gastric or duodenal ulcer; seven had hiatus hernia with duodenal ulcer; one had hiatus hernia only, and four had no other demonstrable abnormality. Douglas[4] reviewed the subject and reported five cases associated with gastroduodenal intubation. All had surgical abdominal lesions requiring intubation for relief of vomiting which was a prominent symptom at one stage of the history. He stated that from 1915 to 1956, 23 similar cases had been reported in the literature. All were single stenotic lesions. In all but one of these, the stricture was in the lower one third of the esophagus. The other was at the junction of the middle and lower one third. He felt the tube itself was not a primary factor. The most important factor, he concluded, was the effect of regurgitation of gastroduodenal juices into the lower one third of the esophagus, associated with prolonged and persistent vomiting.

Others who favor a reflux mechanism with resulting esophagitis and stricture are Ripley, Olsen and Kirklin,[5] Bingham,[6] Allison,[7] Benedict and Daland,[8] Craighead,[9] Barrett and Franklin.[10] All of these authors considered reflux of acid and pepsin as the primary factor in resulting esophagitis and stenosis. McKeown[11] favors a reflux mechanism but instead of acid-pepsin material, he felt the reflux of trypsin was the etiologic agent. Since McKeown's cases developed the stricture after partial gastrectomy, and since pepsin activity is negligible at a ph of 6.0, he reasoned that trypsin probably was the causative agent of reflux esophagitis since trypsin is a powerful proteolytic enzyme.

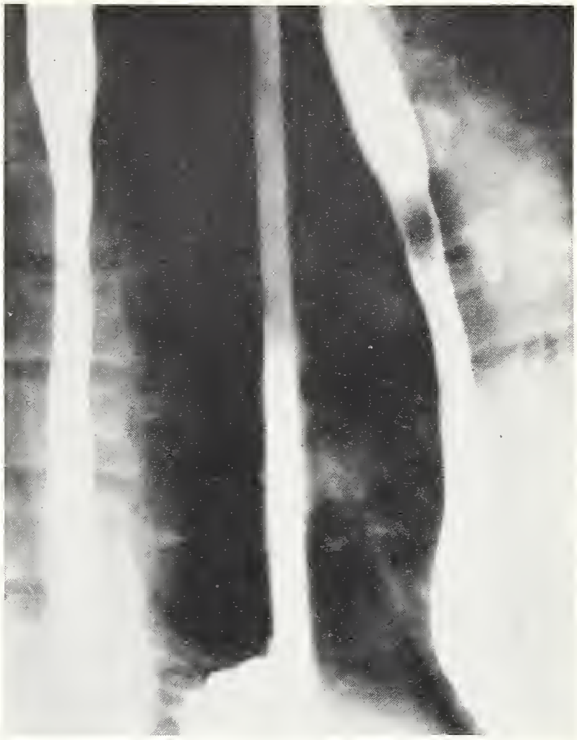

Fig. 4. Radiograph taken on April 9, 1959.

Palmer[12] on the basis of histologic studies of biopsies in 61 cases diagnosed as subacute erosive esophagitis did not agree that peptic esophagitis was caused by the corrosive action of regurgitated gastric juice. Some of his patients were subjected to gastric surgery for relief of stenosis of the esophagus, but his results were not as good as those reported by MacLean and Wangensteen[3] and others. The histologic study in Palmer's cases revealed that evidence of disease was localized primarily to the lamina propria mucosae. The epithelium itself was normal or secondarily involved. On the basis of this study and a review of the literature, Palmer concluded that other factors were primarily responsible for esophagitis. Others who support Palmer's theory are Mosher[13] and Bartels.[14]

Another theory is that of the hypoxia and devitalization of tissue due to decreased blood supply as in shock (following major surgery) or arteriovenous shunts in the esophageal wall. Penner and Bernheim[15] and Block[16] are advocates of this theory. This appears to be akin to a similar theory about the etiology of gastroduodenal peptic ulcers. In both peptic ulcer and peptic esophagitis, the acid-peptic influence may play a secondary role in maintaining the ulceration.

Vinson[17] reported 40 cases of benign stricture of the esophagus of unknown origin. In only two cases was a duodenal ulcer demonstrated by x-ray studies.

Bray and Vinson[18] reported an unusual and interesting case of esophageal stricture in a 38 year old man bitten by a spider, presumably the black widow. The patient had severe epigastric pain and vomiting which continued for 13 hours despite medication for relief. Four days later he was given solid food and complained that it stuck at the lower esophagus. Two months later he presented himself with complaints of 17 pound weight loss and dysphagia. X-ray studies and esophagoscopy confirmed the diagnosis of benign stricture of the lower one third of the esophagus. The patient was dilated twice with marked improvement.

Finally, there is the theory of displaced remnants of gastric mucosa as a cause of stenosis of the esophagus. Wyndham[19] reported the case of a 9 year old boy in whom a stricture of the esophagus occurred in the absence of hiatus hernia or demonstrable reflux. Biopsy showed mucosa similar to gastric mucosa.

Probably the only case of uncomplicated operation for duodenal ulcer followed by stricture of the esophagus was reported by Strauss.[20]

SUMMARY

1. A case of double benign stricture of the esophagus following subtotal gastric resection is reported. Although it has probably occurred before, I did not find another case report in which two separate levels of the esophagus were involved by benign stricture, nor did any of the authors in the bibliography allude to such a case in their review of the literature.

2. The several theories of the etiology of benign stricture of the esophagus have been presented. It is probable that two or more factors are responsible.

3. The treatment of most strictures of the esophagus is not difficult and can be managed on an outpatient basis as was done in this case.

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I wish to gratefully acknowledge the cooperation of Dr. Sam J. Merenda, consulting radiologist.

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President's Message

Special Article

Dr. Askey presented the Address of the President before the House of Delegates of the American Medical Association at the Clinical Session in Washington, D. C., on Monday, November 28.

It is always an inspiration to be in Washington—the capital city that represents all Americans.

And it is always appropriate for a national association to hold a national meeting here. For us in the American Medical Association to assemble here now is especially timely and significant.

We are here again for two purposes—two goals for which our Association was founded 114 years ago and for which our Association today still works for with might and conviction. These are simply: To promote the science and art of medicine and the betterment of the public health.

We have been dedicated to these aims in the past and we are dedicated to them now. Nothing shall deter us. And we shall pursue them along many pathways—scientific, economic, legislative and political.

Washington is definitely an outstanding medical center in our nation, and therefore it is fitting that our Association has come here to pursue the latest in the science and art of medicine.

Washington also is the nation's legislative fountainhead, and therefore the laws enacted here affect the political and economic future of all citizens.

It is fitting therefore that our Association is here, at this time, to make our position clear once again on certain legislative proposals dealing with the health and medical care of our citizens.

In recent years the American Medical Association has been particularly interested in developing the specifics of a sound approach to the health service and facilities needed for the aged. The Congress also has studied and debated the issue of health care insurance for the aged during recent years.

We were pleased when Congress passed and sent to the White House a voluntary, federal-state plan of helping elderly persons who need help, meet their medical and hospital costs.

Both the defeat (51-44) in the Senate of the Anderson amendment for a health care program utilizing the social security mechanism and the victory of the Mills-Kerr bill were a culmination of months of intensive work by the state and local medical societies and by individual physicians, by strong allies in business and industry and by many dedicated Congressmen and Senators of both parties.

Your A.M.A. supported to the fullest the broad proposal of federal-state matching funds to provide care for the needy and the near-needy aged because it believed the program would provide the best possible medical care for our older citizens.

Despite the fact that this sound, far-reaching legislation was passed and was signed into law, the proponents of the Social Security approach elected to introduce the issue into the recent national political campaign. They did this even though the health care measure voted by Congress provided hundreds of millions of dollars to finance health care costs of those elderly persons who needed it.

I am sure many of you were disquieted to learn that the electoral college majority went to the presidential candidate whose party's platform backed the social security approach.

The President-Elect will bring to this city and to our nation a new administration in less than two months. With the executive branch of the government in his control he undoubtedly will attempt to carry out certain promises he made in the field of medical care for the aged. He may try to do that which he could not do with supposed control of the legislative branch of the government last August.

As a national association of physicians dedicated to high medical principles and ethics and to democratic ideals, I can assure this new administration that the medical profession has great respect for the office of the President of the United States and shall cooperate with it whenever and wherever possible.

However, this does not mean that the American Medical Association intends to change its basic policies merely to conform to those of the new administration or any segments of either political party.

We shall propose and promote our views on the betterment of the public health—for all age groups—regardless of friends and foes. For us the best possible medical care and the principle of the freedom of the individual—both doctor and patient—are far more important than political expediency.

While our profession clearly may face a hard struggle in the 87th Congress on the issue of medical aid for the aged under Social Security, there is no ground for defeatism!

Our cause is far from lost. We know, that our policy position is in the best interests of all Americans, the aged included, and our willingness to defend this policy must be strengthened and maintained.

I remind you that medicine has many friends in both parties in Congress today. In fact, I would say that in this year's national elections we have increased that number in both the House and Senate.

Furthermore, we can take heart in the fact that a number of legislators who strongly endorsed the social security approach to medical care for the aged will not be returning to Washington for the 87th session of Congress.

Several other factors also should bolster our confidence.

1. Although an all-out drive was conducted to purge large numbers of conservative Democrats and Republicans, this campaign failed—with one or two exceptions.

2. The President-Elect's margin of victory is so narrow that it would be difficult for even the most zealous adherent to consider this a mandate for a massive program of social change.

3. The results make it dramatically evident that a powerful and articulate body of conservative opinion exists in this country.

No, defeatism has no place in our ranks as we prepare to fight new versions of the kind of proposed legislation we defeated in the last session of Congress.

Our position is right. We are together on this issue. Our allies have fought, and will fight, side by side with us. And our friends in Congress—in both parties—can be expected to battle once again to keep the sound legislation now in effect, and to maintain the principle of individual initiative, local determination, local administration and local control.

We believe in the Mills-Kerr program because it is operated at the state, rather than the federal, level. The individual states will decide who is eligible for help and how much and what type of help they will receive. As this House of Delegates recommended in June:

"The determination of medical need should be made by a physician and the determination of eligibility should be made at the local level with local administration and control," and the federal government has responsibility for care "only in conjunction with the other levels of government."

Potentially, this act can provide for better assistance in meeting medical expenses for our older citizens better than any of the programs proposed as appendages to the Old Age and Survivors insurance section of the Social Security Act. I am talking now not only about the level of government at which the programs are administered, but also about who is helped and how much he is helped.

We must put forth a sincere and concentrated effort during the coming year to make the Mills-Kerr law effective, to show that it can, practically as well as potentially, solve the problem of medical care for the aged.

The medical profession has testified that the aged can best be helped through locally administered programs, aimed at those in real need. It has testified in favor of individual initiative, bolstered by voluntary health insurance and community and state programs for those unable to meet their own costs. It has strongly supported the Mills-Kerr bill.

Congress in its wisdom has followed this prescription. If we don't make the medicine work and if the patient doesn't show signs of improvement, our professional advice may be shown much less respect in the future.

I strongly urge this House to charge all county and state medical associations with the responsibility of providing the medical leadership necessary to implement the Mills-Kerr bill as rapidly as possible.

Of course, physicians should definitely give the new administration their wholehearted support in all programs that will preserve peace, representative government, free enterprise, fiscal solvency, and the stability of the dollar, and that will truly promote the well-being of all the American people.

Like the President-Elect, we too oppose vigorously job discrimination because of age, and we definitely favor more jobs for the aged. Also our Association supports a brick-and-mortar plan for medical education. Here the profession most emphatically states that there is sufficient need for assistance in the expansion, construction and remodeling of the physical facilities of medical schools to justify a one-time expenditure of federal funds on a matching basis.

Furthermore, we too favor the best possible medical research on major diseases. However, mere "stepping up" of such research by using more money is not necessarily going to produce the desired results. If money were the only necessary ingredient for the conquest of heart disease, cancer, the common cold and other illnesses, we undoubtedly would have had cures, vaccines and successful treatments long ago.

Helter-skelter spending will not give us medical research results; however, good planning, talented scientists, top-notch facilities and adequate funds perhaps may do the job.

I submit to you that after having reviewed the health and medical programs of political parties and political candidates, there is little—if anything—unusually new in the proposals made in recent months.

Medical care for the aged, medical research, medical education and more physicians, health insurance, rehabilitation and mental health—these topics are familiar to all of us, for we are constantly studying them and improving upon them. Efforts to deal politically with any one of them is not going to bring forth a magic solution.

Remember our nation's medical strength and growth have not come from the federal government and tax spending. As always our medical strength and growth have come from creativeness, competitiveness, initiative, responsibility and dedication of the men and women of medicine, science, and industry. These are the factors we have relied upon to attain the greatest medical heights in the world.

What folly it would be to bench this superb combination and replace it with federal controls, domination, red tape and a cornucopia of tax dollars.

From bold plans in voluntary health insurance to splendid hospitals and clinics; from incredible new medical instruments to wonder-working vaccines; from electronic medical marvels to great surgical feats; from revolutionary drugs to rehabilitative aids to make a man whole again—these are some of the advances all of us have seen delivered to the American people by private, free enterprise.

And I take particular pride in the role our Association has played in each of these.

Furthermore, every A.M.A. member should be enthusiastic and vocal about the many special projects launched by your Association in behalf of the public health in just the last six months or so. These programs too will undoubtedly have a real impact on the health of many Americans.

Specifically, I refer to such far-reaching work as:

The five-year study on infant mortality and morbidity with the aim of preventing and reducing deaths and defects of babies by the thousands in this decade.

Our new campaign to assist the public in spending its health care dollars more wisely, and thus to eliminate expenditures on phony cures, food fads, health literature and many other forms of quackery.

Our continuous efforts to add life to the added years of old age and to improve the health care of our elderly citizens.

Our safety campaign to reduce traffic deaths significantly via seat belts and new laws on safety devices in new automobiles.

Our medical recruitment program to draw a greater quantity and quality of applicants to the nation's medical schools, and thus help to insure our nation of an adequate supply of well-trained physicians.

Our new program to provide assistance in the medical missionary work being done by all religious denominations overseas.

Our poison control campaign to prevent the death and injury of thousands of children and adults.

I could continue with this impressive listing of excellent programs.

Because of these specific projects we have gained a momentum that we ought not to lose.

Because of the increasing public interest in medicine and good health, there is a definite need for the A.M.A. to keep pace with every new advancement in the scientific and socioeconomic medical field. We must not only keep pace but also we must provide the leadership in making the advantages of this program available to all Americans.

This House of Delegates, the Board of Trustees, the A.M.A. councils and committees, and the staff have realized this in recent years, and have suggested interesting significant ways for the A.M.A. to perform its public services and its continuing education for practicing physicians.

But good works require money. And in modern times they are increasingly expensive because of medicine's complexities.

I wish that each of you could have sat in on the recent sessions of the Board of Trustees as it deliberated on the 1961 budget. While no one wanted to drop or discourage projects, I must report that budget balancing made it necessary to curtail and to delay many very important and vital programs.

As the nation's most resourceful medical organization, our responsibilities to a growing nation intensely interested in health have multiplied. As members of this Association, I believe that we should support not only existing programs but also expansion of these and other new programs which must be initiated to meet the challenges of our society.

We now are on a massive offensive against disease and unnecessary death and injury, and for the betterment of the public's health.

Additional funds to strengthen this offensive are needed, and I submit to this House of Delegates that our individual responsibility is to accept a larger financial share in the best possible A.M.A. program for the public and for ourselves.

Furthermore, it is incumbent upon each of us, each of our state medical associations, and each of our county societies to bring into our memberships all eligible physicians who are not now participating in our efforts to promote the art and science of medicine and the betterment of the public health.

Now only one out of ten physicians, who in my opinion, should be in the A.M.A., does not belong to the Association. We must actively seek to add all those currently outside our ranks so that we may truly represent the strongest, most united front possible as we face our responsibilities to the American people.

In unity I believe that we can find greater wisdom, greater potential, greater strength and greater perseverance. And thus as a unified profession, we can prove to be the nation's, and the world's, most potent influence for the best possible health for all the people.

ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

February 28, March 1, 2 and 3, 1961

Palmer House, Chicago

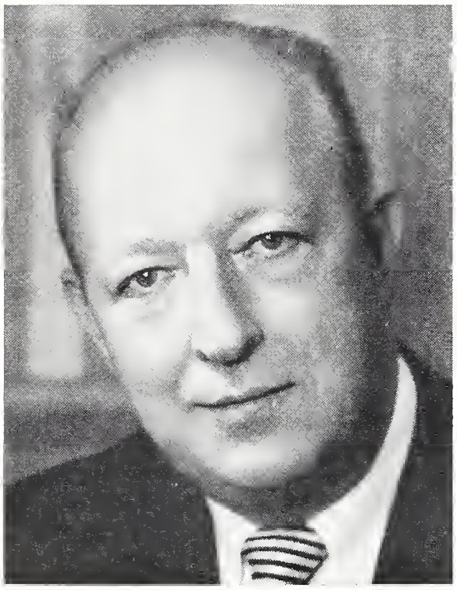
Daily Half-Hour Lectures by Outstanding Teachers and Speakers on subjects of interest to both general practitioner and specialist.

Panels on Timely Topics — Teaching Demonstrations

Medical Color Telecasts — Instructional Courses

Scientific Exhibits worthy of real study and helpful and timesaving Technical Exhibits.

The Chicago Medical Society Annual Clinical Conference should be a MUST on the calendar of every physician. Plan now to attend and make your reservations at the Palmer House.



R. O. Muether, M.D.

President's Message

"Togetherness," not even an especially pleasant sounding word and certainly overworked since someone conceived it some time back, however does have its applications. Each year and each decade seem to bring more complications to the private practice of medicine and, more important, to the best medical care for the public. Certainly today sees an era when the medical profession needs to stand united.

By the time of the Annual Session, to be held at Hotel Muehlebach, Kansas City, March 19 to 22, 1961, convenes, there will without doubt be specific problems before the medical profession—that is, additional ones. These will come before the House of Delegates and the consideration of all members, both of delegates and other members, will be needed. The House of Delegates is open to all members and any member may speak before the reference committees.

Besides assisting in the problems to be faced, an excellent and varied program has been arranged by the Committee on Scientific and Postgraduate Work and appears in this issue.

It is the time now to plan to attend the session.

R. O. Muether M.D.

EDITORIALS

ANNUAL SESSION WILL BE HELD IN KANSAS CITY

The 103rd Annual Session of the Missouri State Medical Association will be held at Hotel Muehlebach, Kansas City, March 19, 20, 21, 22. The program for the Session appears on pages 44 and 46.

The schedule of the Session will be changed some from recent years, the principal change being that the last Session of the House of Delegates will be a breakfast meeting on Wednesday morning, thus curtailing the time of the session by one half day. This was done in compliance with answers to questionnaires which were sent to members following the last Annual session. The report of the survey was given in minutes of the Council meeting of May 21 and 22.

Also, the program has been planned to emphasize the things that were asked for by members answering the questionnaires. Diversification of subject matter and practical value were stressed and the program committee has followed these dictates in planning the program for this session.

INCREASE IN MEDICAL SCHOOL CONSTRUCTION ANTICIPATED

A sharp rise in construction of medical school facilities is expected in the 1960-1961 period, the American Medical Association reported in its annual report on medical education.

The 1959-1960 report compiled by the Council on Medical Education and Hospitals of the American Medical Association showed that the total number of medical school graduates was the largest in history. The first year enrollments remained virtually constant.

Funds committed for construction of medical school facilities in 1960-61 showed an increase of 140 per cent over the figure for the previous year. Cost estimates of facilities completed in 1959-1960 were up 35 per cent, and estimates of construction begun in 1959-1960 increased by 25 per cent.

Construction planned by 42 schools for 1960-1961 was estimated at $126,726,167. Construction completed by 34 schools in 1959-1960 was set at $94,774,376. Construction begun by 30 schools in 1959-1960 was valued at $74,144,742.

The report, which was carried in full in *The Journal of the American Medical Association*, included a special study of the potential expansion possible by existing medical schools. The findings indicated that the present maximum enrollment for the schools was 8,188 and that if the same schools were able to expand under ideal circumstances, maximum enrollment could be boosted to 9,894.

However, the Surgeon General's Consultant Group on Medical Education has estimated that there is need for facilities to handle about 12,000 first year enrollments by 1971.

This goal, the Council on Medical Education and Hospitals said, "will require major changes in medical school financing and extensive and expensive facilities that will need to be constructed."

"Medical school faculties will have to be greatly augmented," the report said, and "the available supply of well-trained and well-qualified students with enough financial backing from either private or public funds to enable them to complete their medical training will have to be increased considerably. Finally, in addition to this necessary expansion of existing schools, it will still be necessary to establish several new medical schools in the next decade."

The University of Missouri School of Medicine was one of six schools reporting increases in their graduating classes of 1959-1960 of more than 15 per cent. The other schools were Albert Einstein, New York; Arkansas. Little Rock; Pittsburgh, Pittsburgh; Western Reserve, Cleveland, and North Carolina, Chapel Hill.

The record number of students receiving M.D. degrees totaled 7,081, compared with 6,860 in 1958-1959, and the previous record of 6,977 in 1954-1955. Women made up 5.5 per cent of the 1959-1960 graduating class.

First year enrollment for 1959-1960 was 8,173, compared with 8,128 in 1958-1959. The average size of entering classes was about 96 students.

Approximately two thirds of the students entering medical schools had "B" average grades while the other third was divided equally between "A" and "C" students. This make-up showed little change from the previous year.

There also was little change in the number of students who dropped out of medical school. However, there was a decrease from 73 per cent to 57 per cent in the number who dropped out in the third and fourth years "for reasons other than academic."

Ramblings of the Field Secretary

James T. Cook, M.D. of Marianna, Florida, a community of approximately 8,500 people, was the 14th recipient of the General Practitioner of the Year award presented annually by the American Medical Association at its interim session. The award was a gold medal and a citation outlining his contributions in combining his talents in bringing the best of scientific medicine to his patients and devoting much of his seemingly unlimited energies to the service of his community as a whole. He was chosen by the A.M.A. from the thousands of general practitioners throughout the country who have dedicated their lives to the practice of medicine and who have given exceptional service to their community.

Dr. Cook is 44 years of age and is the second youngest doctor to receive this honor. He is married and has four children. This may be a part of his reason for being extremely active in PTA activities. He also served as the first male President of the Marianna PTA. He has practiced in Marianna for the past 15 years and in addition to a busy practice, he has entered into every facet of the social, business, and medical activities of his community.

Both Dr. and Mrs. Cook have been active in boy and girl scout affairs and in 1958 he served as campaign chairman for the girl scouts.

Among the other organizations that Dr. Cook has served in various capacities are Rotary Club, Sportsman Club, Methodist Church, and the Civic Music Association. Dr. Cook is a very active member of his local medical society and is also a Past President. He has been Chief of Medicine of his community hospital for many years and served for two years as Chief of Staff. In 1960 he was named President-Elect of the Florida Academy of General Practice.

Among the first to congratulate Dr. Cook was Dr. J. N. Travis, Jacksonville, Texas, 84 year old recipient of the award in 1952. A resolution was presented to the House of Delegates at this session to change the title of "General Practitioner of the Year" to "Physician Citizen of the Year." However, the reference committee which discussed this proposed title change, observed that since the inception of this award it has become a noble tradition, has reflected credit upon the recipients, and has enhanced the prestige of the entire medical profession. Therefore, the committee recommended to the House that the resolution be not adopted and that the award be continued as at present. The House of Delegates concurred in the committee's recommendation.

MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

Fourteenth Annual Convention
at the
Hotel Muehlebach
Kansas City, Missouri
March 19, 20, 21 and 22, 1961

PROGRAM

Sunday, March 19, St. Joseph Hospital

Business Meeting, Missouri Society of Medical Technologists
Buffet Supper
Business Meeting, Missouri Association of Blood Banks

Monday, March 20

Dinner Sponsored by the Missouri Pathologists

Tuesday, March 21

Tour Midwest Research Institute

Scientific Program, March 20-22

Will include Blood Banking, Hematology, Bacteriology, Parasitology, Serology, Radioisotopes, and Chemistry

Radioisotope Workshop

Tuesday Afternoon, March 21

St. Mary's Hospital

News—Personal and Professional

Among speakers at the 38th annual meeting of the Missouri Hospital Association held in Kansas City November 15, 16 and 17 were Drs. **Vance E. Link**, Independence; **John H. Mayer, Jr.**, Kansas City; **Hector W. Benoit**, Kansas City, and **James F. O'Malley**, Kansas City.

Speaker at a November meeting of the Missouri School of Mines Chapter of the National Organization of University Dames at Rolla was **E. E. Feind**, M.D., Rolla.

At an annual Tuberculosis Nursing Institute at St. Mary's Hospital, St. Louis, speakers were **W. C. Meinershagen**, M.D., Jefferson City, and **John C. Murphy**, M.D., St. Louis.

At an annual meeting of the Macon County Tuberculosis Association held in Macon this fall, **Howard Miller**, M.D., Macon, was reelected vice president.

Chairman of the Diabetes Detection Drive in Marion, Ralls and Shelby Counties was **Wyeth Hamlin**, M.D., Hannibal.

The Southern Medical Association at its St. Louis meeting this fall elected **Grayson L. Carroll**, M.D., St. Louis, second vice president.

The medical staff of Trinity Lutheran Hospital, Kansas City, elected **Milton B. Casebolt**, M. D., Kansas City, president.

The University of Missouri School of Medicine has announced that William D. Mayer, M.D., Rochester, N. Y., has been appointed assistant dean, to begin his duties June 1, 1961.

Staff of the Missouri Baptist Hospital, St. Louis, reelected **C. H. Kilker**, M.D., chief of staff at a meeting early in November. **Robert M. Smith**, M.D., St. Louis, was reelected associate chief of staff, and **Warren M. Lonergan**, M.D., St. Louis, secretary. **P. C. Hall**, M.D., **George Anstey**, M.D., **Drennan Bailey**, M.D., and **E. M. Cannon**, M.D., were reelected to the executive committee.

At a meeting of the Newton County Chapter of the American Cancer Society held at Neosho in November, **Everett D. Sugarbaker**, M.D., Jefferson City, was the speaker.

The Laclede County Health Council had **Charles A. Brasher**, M.D., Mount Vernon, as speaker at a meeting in Lebanon in November.

The St. Louis Heart Association elected **Walter Baumgarten**, M.D., St. Louis, president, at its annual meeting held in November.

The League of Women Voters of Missouri has named **Rosellen Cohnberg**, M.D., Monett, to serve as foreign policy chairman.

Honored at a dinner in mid November by the staff of Christian Hospital, St. Louis, were Drs. **T. R. Ayars** and **Robert C. McElvain** for their long service on the staff.

The Missouri Academy of General Practice elected **Roy W. Pearse, Jr.**, M.D., Nevada, as president-elect. **Cecil G. Leitch**, M.D., Kansas City, was installed as president at the Academy's meeting in St. Louis in early November.

Project Hope

Missouri representatives of Project Hope are Kenneth C. Hollweg, M.D., Kansas City; Leonard T. Furlow, M.D., St. Louis, and W. W. Tillman, M.D., Springfield. Members will be urged to contribute to this project, described on page 6, in the near future. At present contributions may go to Dr. Furlow, 3720 Washington Ave., St. Louis 8.

MISSOURI STATE MEDICAL ASSOCIATION

103rd Annual Session

Hotel Muehlebach, Kansas City

March 19, 20, 21, 22, 1961

Sunday, March 19, 1961

1:30 p.m. House of Delegates, Colonial Room.

3:30 p.m. Reference Committee meetings, Rooms A, B, 362, 363, 364.

PROGRAM

Monday, March 20, 1961

8:00 a.m. Registration, Grand Ball Room.

9:00 a.m. Refresher Courses:
Office Ophthalmology, John A. Buesseler, M.D., Columbia, Room 362.
Office Urology, James C. Cope, M.D., Columbia, Room 363.
Electrocardiography, John A. Nuetzel, M.D., Clayton, Colonial Room.
Emergencies in the Newborn Infant, M. Remsen Behrer, M.D., St. Louis, Room 364.

10:00 a.m. Intermission to View Exhibits.

10:30 a.m. Panel: What's New? Colonial Room.
Moderator: Kenneth K. Keown, M.D., Columbia.
Panelists:
Tranquilizers and Analgesics, Jackson A. Smith, M.D., Chicago.
Radiologic Diagnosis, Armand E. Brodeur, M.D., St. Louis.
Burns, William Stoneman, M.D., St. Louis.
Allergics, Giles A. Koelsche, M.D., Rochester, Minn.

12:00 noon Maternal Welfare Luncheon, Trianon Room.

2:00 p.m. Panel: Leukemia, Room T 22.
Sponsored by Missouri Division, American Cancer Society.

2:00 p.m. Treatment of Diseases of the Thyroid, George Crile, M.D., Cleveland.
Sponsored by the Missouri Surgical Society.

2:30 p.m. A Natural History of Juvenile and Adult Diabetes, Robert C. Hardin, M.D., Iowa City, Iowa.
Sponsored by the Missouri State Diabetes Association.

3:00 p.m. The Changing Epidemiology of Tuberculosis, John S. Chapman, M.D., Dallas, Texas.
Sponsored by the Missouri Chapter, American College of Chest Physicians.

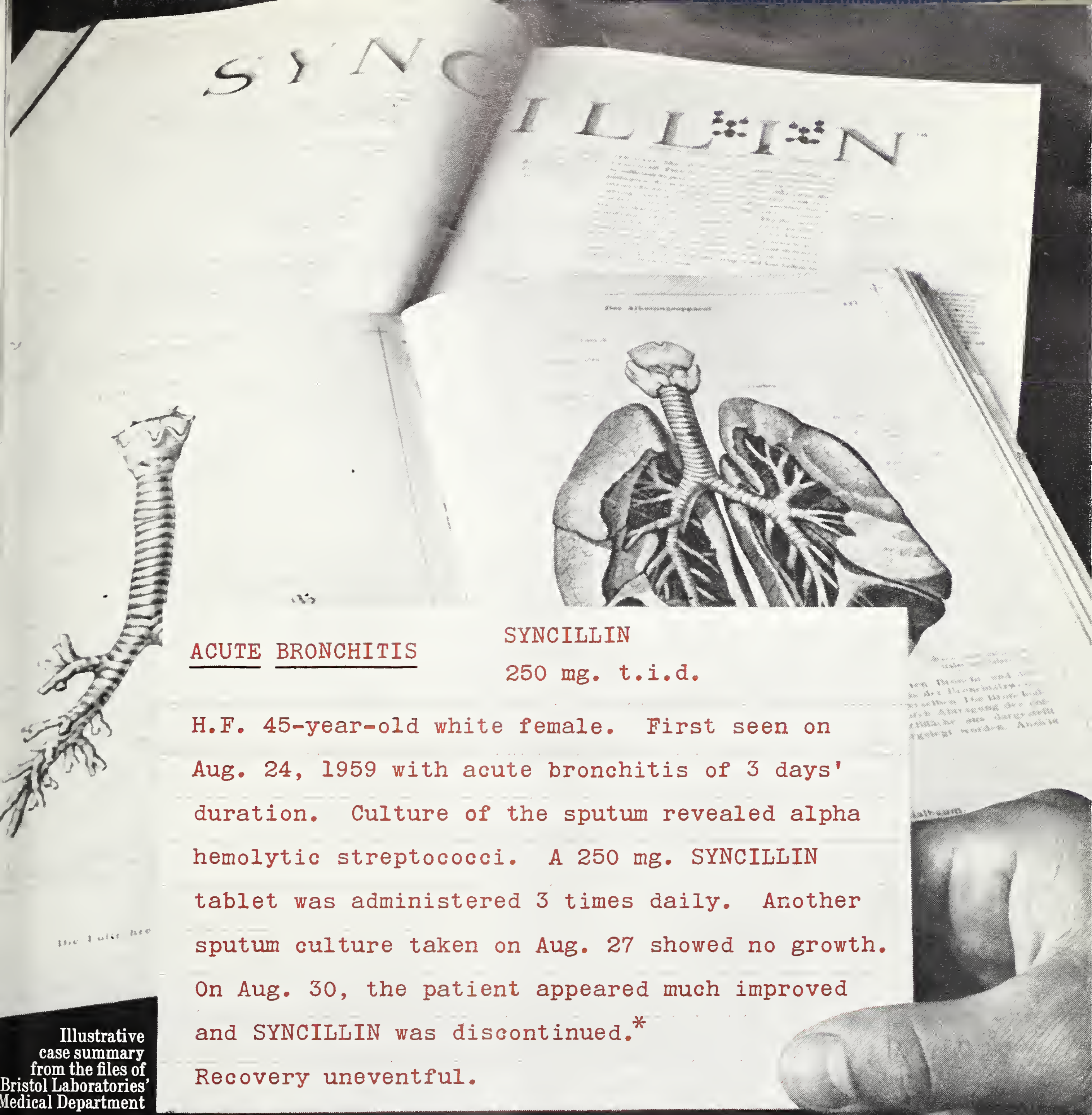
3:30 p.m. Intermission to View Exhibits.

4:00 p.m. House of Delegates, Colonial Room.

4:30 p.m. Reference Committee meetings, Rooms A, B, 362, 363, 364.

Tuesday, March 21, 1961

9:00 a.m. Panel: Hypnosis: Indications and Complications.
Moderator: Henry V. Guhleman, Jr., M.D., Jefferson City.
Panelists:
Obstetrics, Melvin M. Schwartz, M.D., St. Louis.
Psychiatry, Louis J. West, M.D., Oklahoma City.
Anesthesia, O. B. Crawford, M.D., Springfield.



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Syncillin Pediatric Drops – 1.5 Gm. bottles. Calibrated dropper delivers 125 mg. (200,000 units)

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Complete information on indications, dosage and precautions is included in the circular accompanying each package.

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10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Hip Joint Problems From Birth to Old Age, J. Vernon Luck, M.D., Los Angeles, Calif.

11:45 a.m. Questions and Answers.
Moderator: M. Pinson Neal, M.D., Columbia.

12:00 noon University of Missouri Medical Alumni Luncheon, Trianon Room.

2:00 p.m. Mitral Incompetence, Howard B. Burchell, M.D., Rochester, Minn.

2:30 p.m. Intermission to View Exhibits.

3:00 p.m. Panel: Out-Patient Trauma, Colonial Room.
Moderator: Robert E. Funsch, M.D., St. Louis.
Panelists:
Injuries Peculiar to Children, J. Vernon Luck, M.D., Los Angeles, Calif.
Injuries of the Head and Neck: Treatment and Precautionary Measures, Howard J. McAlhany, M.D., Springfield.
Injuries of the Knee and Ankle, Paul W. Meyer, M.D., Kansas City.
Injuries of the Wrist and Hand, Otis E. James, Jr., M.D., Kansas City.
Thermal Injuries, Including Ambulatory Burns and Frostbite, C. Alan McAfee, M.D., St. Louis.
Injuries to the Shoulder and Elbow, Robert E. Funsch, M.D., St. Louis.
Sponsored by the Committee on Trauma, Missouri State Medical Association.

3:00 p.m. Panel: Management of Difficult Heart Problems, Room T 22.
Moderator: Hugh E. Stephenson, Jr., M.D., Columbia.
Panelists:
Theodore E. Keats, M.D., Columbia.
Jack M. Martt, M.D., Columbia.
Henry G. Steckle, M.D., Columbia.
Sponsored by the Missouri Heart Association.

4:30 p.m. Adjournment.

Wednesday, March 22, 1961

7:30 a.m. House of Delegates Breakfast, Trianon Room.

9:30 a.m. Panel: Exfoliative Cytology in Your Practice, Room T 22.
Moderator: L. R. Moriarty, M.D., Kansas City.
Panelists:
Hector W. Benoit, Jr., M.D., Kansas City.
George O. Miles, M.D., Kansas City.
Robert L. Newman, M.D., Kansas City, Kans.
Sponsored by the Missouri Pathologist Society.

9:30 a.m. Panel: The Doctor Is Sued, Colonial Room.
Moderator: Charles B. Wheeler, Jr., M.D., LL.B., Kansas City.
Panelists:
Frederick D. Lewis, LL.B., Lawrence, Kans.
Blake A. Williamson, LL.B., Kansas City.

11:00 a.m. Intermission to View Exhibits.

11:30 a.m. A Review of the Nature of Angina Pectoris, E. Grey Dimond, M.D., La Jolla, Calif.
Sponsored by the Missouri Society of Internal Medicine.

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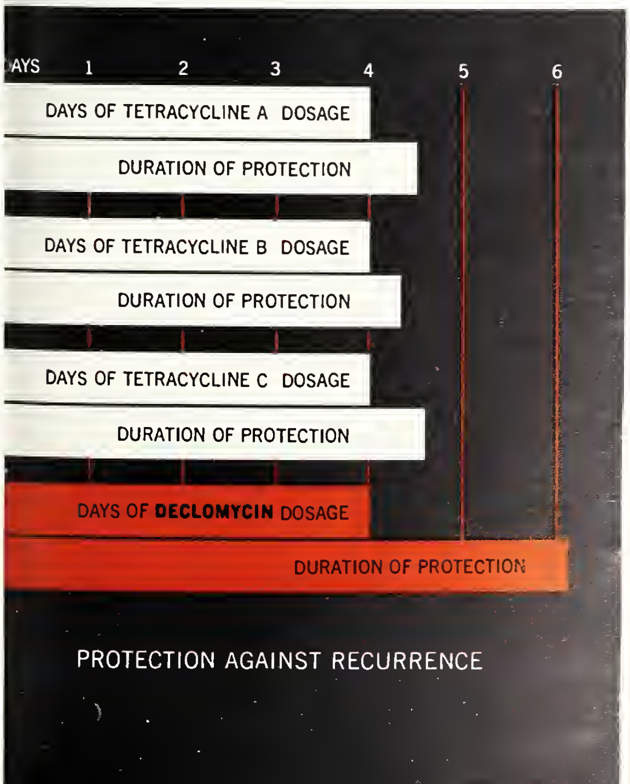

CAPSULES, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

PEDIATRIC DROPS, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

SYRUP, 75 mg./5 cc. teaspoonful (cherry-flavored), bottles of 2 and 16 fl. oz. **Dosage:** 3 to 6 mg. per pound body weight per day—divided into 4 doses.

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NEW MEMBERS

Bruce B. Bellomy, M.D., Professional Bldg., Springfield, has become a member of the Greene County Medical Society. Dr. Bellomy is a native of Texas, received his preliminary education in California, and his M.D. degree from George Washington University in 1959.

John F. Bergmann, M.D., 818 Risdon Drive, St. Louis, has become a member of the St. Louis County Medical Society. Dr. Bergmann is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1954.

Marcy A. Goldstein, M.D., 6943 Columbia Place, St. Louis, has become a member of St. Louis Medical Society. Dr. Goldstein is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1951.

George P. Hoech, Jr., M.D., 4418 Forest Park Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Hoech is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1960.

Lawrence A. Pilla, M.D., 6833 Graham Road, St. Louis, has become a member of St. Louis County Medical Society. Dr. Pilla is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1945.

Charles R. Simmons, M.D., 114 N. Main St., Windsor, has become a member of the Henry County Medical Society. Dr. Simmons is a native of Iowa, received his preliminary education in Nebraska, and his M.D. degree from the College of Medical Evangelists in 1959.

Robert T. Van Norman, M.D., 634 North Grand Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Van Norman is a native of Texas, received his preliminary education in Texas, and his M.D. degree from St. Louis University School of Medicine in 1950.

Elmer G. Wakefield, M.D., 1534 E. Sunshine St., Springfield, has become a member of the Greene County Medical Society. Dr. Wakefield is a native of Arkansas, received his preliminary education in Arkansas, and his M.D. degree from John Hopkins Medical School in 1925.

Alvon C. Winegar, M.D., 1531 E. Sunshine St., Springfield, has become a member of the Greene County Medical Society. Dr. Winegar is a native of Michigan, received his preliminary education in Michigan, and his M.D. degree from Wayne University in 1942.

DEATHS

Byrd, Homer E., M.D., Carthage, a graduate of the University of Louisville, 1930; member of Jasper County Medical Society; aged 54; died October 27.

Meiners, Edwin P., M.D., St. Louis, a graduate of National University of St. Louis, 1916; member of St. Louis Medical Society; aged 67; died October 28.

Mitchell, Ernest, Baytown, Texas, a graduate of Washington University, 1912; member of Jasper County Medical Society; aged 72; died November 3.

St. John, Dewey, M.D., St. Louis, a graduate of St. Louis University, 1932; member of St. Louis Medical Society; aged 61; died November 4.

Simmons, Benjamin B., M.D., Orrick, a graduate of Central Medical College, 1899; member of Buchanan County Medical Society; aged 91; died November 5.

Mason, Roy, M.D., University City, a graduate of St. Louis University, 1905; member of St. Louis Medical Society; aged 77; died November 20.

Drum, Clarence G., M.D., St. Louis, a graduate of St. Louis University, 1924; member of the St. Louis County Medical Society; aged 61.

Jenkins, Joseph M., M.D., St. Charles, a graduate of St. Louis University, 1908; member of Lincoln-St. Charles County Medical Society; aged 77; died November 30.

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County Society News

FIRST DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

The sixth annual joint meeting of the Buchanan County Medical Society and the St. Joseph Bar Association was held in St. Joseph on Wednesday night, November 9, 1960.

One hundred doctors and lawyers attended. Presiding jointly were the Presidents of the two groups, Dr. Thompson E. Potter and Mr. Ronald S. Reed, Sr.

The featured speaker for the evening was Victor Buhler, M.D., pathologist, Kansas City. Dr. Buhler was introduced by Dr. Richard Riddell. Dr. Buhler's remarks were all pointed toward the need for a medical examiner law for the State of Missouri. He said that the present coroner system should be replaced by a medical examiner system in order to bring about better detection of crime in relation to death. He pointed out that the present obsolete setup under which Missouri operates is wholly inadequate to permit accurate scientific analyses of causes of death. Also, he said the coroner in Missouri, by law, is not required to be a person with any scientific background for this work. He cited numerous deficiencies of the coroner system and stated that many deaths by unlawful means are undetected because a medical examination was not held. He pointed out that the enactment of a medical examiner law would prevent many miscarriages of justice and would eliminate much unjust accusations of innocent persons. He said that under such a law a State Board of Commissioners would be appointed on a non-political basis and a central medical examiner's office would be set up at some location in the state.

The chief medical examiner would be a physician properly trained to handle the duties of the office. He further pointed out that the medical examiner system could also be established at much less cost to the taxpayers of the state than the present coroner system. He indicated that the State Medical Association will introduce such a bill during the next session of the State Legislature. Dr. Buhler's presentation was well received by the joint groups.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The regular November meeting of the Grand River Medical Society and its Woman's Auxiliary was held at the Strand Hotel in Chillicothe on Thursday night, November 10.

Following dinner the Auxiliary retired to a separate meeting while the doctors remained to enjoy an interesting and informative scientific program given by Truman Schertz, M.D., ophthalmologist of Kansas City, who spoke on "Eye Emergencies."

Dr. Schertz is a diplomat of the American Board of Ophthalmology and an instructor in ophthalmology at the Kansas University Medical Center and maintains his private practice in North Kansas City.

B. D. Howell, M.D., *Secretary*

SECOND DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Mark Twain Hotel, Tuesday night, November 15, with approximately 20 physicians in attendance. The evening festivities began with a social hour followed by dinner and then a special scientific program.

Dr. Ray was the speaker.

The program consisted of a pilot project under the sponsorship of the Film Committee of the Commission on Education of the American Academy of General Practice and the Education Committee of the Missouri Academy.

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Thorpe Ray, M.D., Professor and Chairman of the Department of Internal Medicine, University of Missouri Medical School, presented the film, "Stress and the Adaptation Syndrome," which presents a number of Doctor Sleye's theories concerning stress. Following showing of the film, Dr. Ray then expanded upon the subject. Following his formal presentation, a general discussion period was held with numerous questions brought forth by those in attendance. This was an excellent program and well received by those fortunate enough to be present.

At the business session the Society voted to sponsor, over the local radio station in Hannibal for 13 weeks, the AMA "Medical Milestone Series." This series consists of five-minute programs developed by the AMA, relating to various developments in medicine which offer excellent public education information to the lay public. The Society will sponsor one of these programs for 13 consecutive Sundays, beginning in December. They will be heard at 12:15 p.m. The society will pay for the time for these radio programs.

Much interest was shown by the audience.

A report was also given on the diabetes drive in the area, which was being promoted by the medical society. A large ad paid for by the society, in the local newspaper, gave information to the public on the details of the diabetes detection program.

The hour became late so adjournment was called.

Wyeth Hamlin, M.D., *Secretary*

Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday evening, November 10.

The scientific speaker for the evening was John Shapleigh, M.D., St. Louis, whose subject was, "What's New in Hematology?" In his discussion he told the members of the Society that hematology has advanced as fast or perhaps faster than any other field of medicine in the last ten to twenty years. This is due mostly to the development of new research technics, the availability of blood for study, and the somewhat vague subconscious feeling on the part of many people that if a cure or prevention of leukemia can be found, then the secret of all cancer control will soon be discovered. He discussed a number of the more recent advances in the field of hematology such as: the discovery and use of new drugs for the treatment of leukemia and related diseases; a new concept of molecular disease which has led to the discovery that some of the anemias are due to genetic abnormalities in the hemoglobin molecule; and the discovery that the diseases called thrombocytopenic purpura and hemolytic anemia are often due to abnormal antibodies formed within the body. He also predicted that the transplanting or drafting of bone marrow may soon become possible.

Members present were: Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, T. S. Fleming, R. M. Hasson, A. P. Rowlette, C. C. Smith, Szymansky and R. H. Young, Moberly; C. C. Rice and D. D. Stuart, Brunswick; Weger, Keytesville; J. E. Campbell, D. E. Eggleston, H. S. Miller and Carl Rinker, Macon; F. A. Barnett, Paris; and P. V. Dreyer, Huntsville. Dr. Leopold Lachance, Centralia, was present as a guest.

At the business session officers for 1961 were elected as follow: Dr. S. R. Szymanski, Moberly, President; Dr. Gretchen Collins, Macon, Vice President; Dr. J. W. Fleming, Moberly, Secretary-Treasurer. The retiring President is Dr. Howard Miller of Macon.

Josephine Baker, M.D., *Secretary*

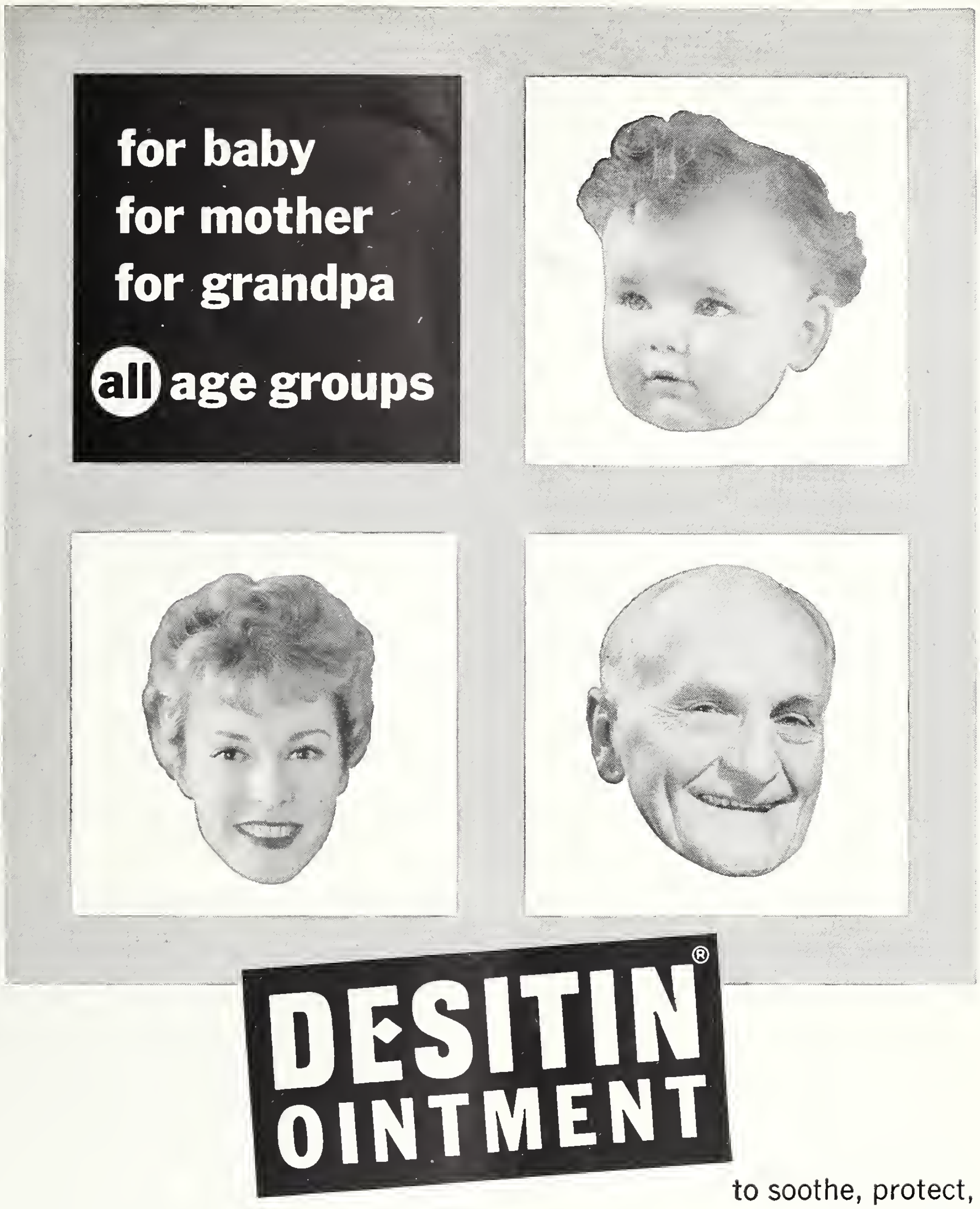
FIFTH DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

A joint dinner meeting of the Audrain, Callaway and Montgomery County Medical Societies was held Tuesday night, November 15, at the Country Club in Mexico.

The evening festivities began with a social hour followed by dinner and a most welcome, interesting discussion by Vernon E. Wilson, M.D., Dean of the Medical School at the University of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Missouri, on some of the medical school's problems, policies and hopes for the future.

His discussion gave all of us much food for thought, and we are all certainly much better informed in regard to the school from his meeting with us.

Ned Rodes, M.D., *Secretary*

SIXTH DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The regular monthly meeting of the West Central Missouri Medical Society was held at the Nevada Country Club, Nevada, November 10, with President Jack Pascoe presiding. The social hour preceded the dinner and scientific program with its usual festivities and visitation of those present. Following the social hour all enjoyed the delicious steak dinner as always served by this club.

President Pascoe introduced John F. McDonnell, M.D., internist, Kansas City, who discussed "The Adrenal Cortex in Everyday Practice." The subject was presented in a clear and interesting manner and was well received by those present and brought forth considerable discussion.

A business meeting followed the scientific program. There was little new business and the meeting was adjourned after some discussion relative to the new slate of officers for the coming year. The December meeting will be held the second Thursday in Butler at the Inn Hotel.

Those in attendance were: Drs. Claude Allen, Rich Hill; C. W. Luter, Butler; Vernon Bickle, Lamar; Rolla Wray and wife, Dr. and Mrs. James Pascoe, P. B. McCann, Dr. and Mrs. Stanley Love, all of Nevada. Our guests were Dr. McDonnell, Kansas City, and Mrs. Jordan Kelling, Waverly, President, State Auxiliary, who met with the ladies during the scientific program presentation.

Carter W. Luter, M.D., *Secretary*

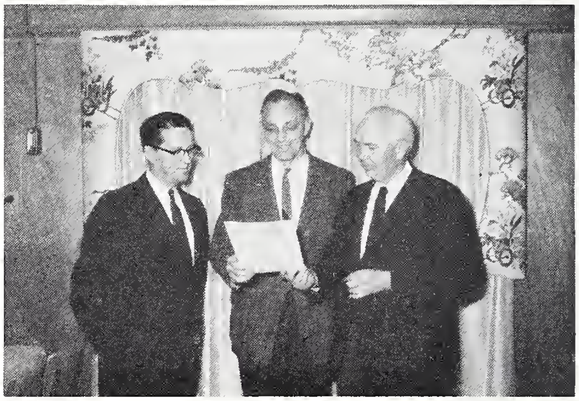
EIGHTH DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

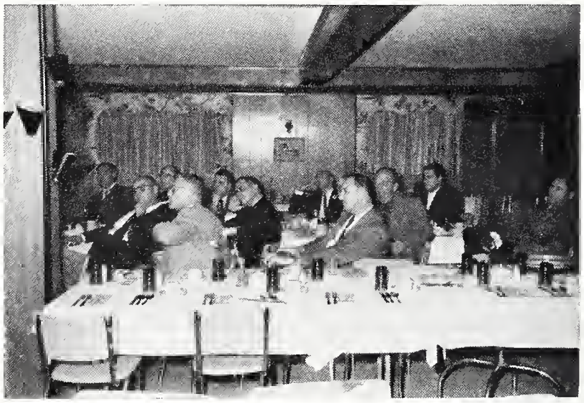
Ozarks Medical Society

The Ozarks Medical Society met Tuesday evening, November 8, 1960, at Zeke's Cafe in Aurora. After a social hour and a fine steak dinner, the meeting was called to order by President Sweany. Following dinner the Auxiliary met with Mrs. F. B. Brown of Aurora to hear a talk by the Superintendent of the Federal Medical Center in Springfield.

The medical society program was introduced by Dr. Doyle McCraw, Bolivar, Chairman of the Committee on Education of the Missouri Academy of General Practice. The program consisted of a showing of a scientific film entitled, "Still Going Places." The active management of disability in the aged was depicted in the film. Don Rose, M.D., Chairman, Department of Physical Medicine, University of Kansas School of Medicine, further discussed the subject and indicated some of the things they were doing at the University of Kansas School of Medicine in this field. The subject was then opened up for general discussion.

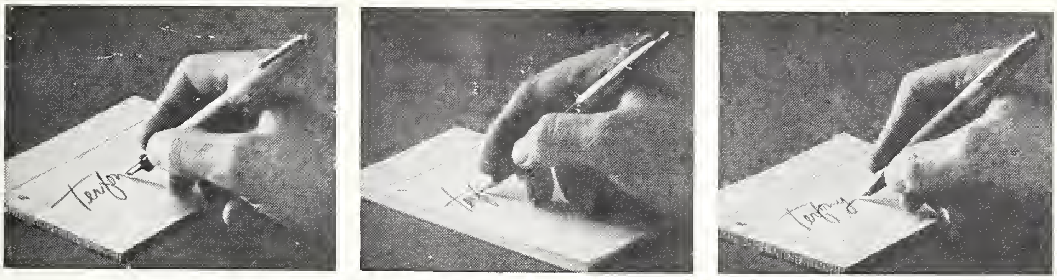


Drs. Rose, Ruhe and McCraw.



A good audience attended in spite of election day.

David S. Ruhe, M.D., Department of Medicine and Director of Audio-Visual Education, University of Kansas Medical School, explained this particular program as a pilot study under the auspices of the Film Committee of the Com-



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mission on Education of the American Academy of General Practice. A questionnaire was passed out to those present which solicits the reaction of the listeners to the program; that is, to the use of a teaching film supplemented by an expansion of the subject by a qualified speaker and then a general discussion.

During the business part of the meeting, the following actions were taken:

An application by transfer was received from Dr. Donald B. Rogers of Nixa, which was referred to the credentials committee. A motion was made and passed to approve the use of osteopaths in those areas not served by an M.D. for supervision of the bloodmobile. This was done at the request of Dr. E. M. Fessenden, Director of the Springfield Regional Blood Center.

The December meeting of the Society will be held in Mount Vernon at the Sanatorium.

A. J. Graves, M.D., *Secretary*

Greene County Medical Society

A regular meeting of the Greene County Medical Society was held Friday, October 28, at the Holiday Inn with 66 members of the Medical Society and 92 members of the Greene County Bar Association present as guests of the Society.

The president, Dr. Tillman, presided.

Dr. Tillman welcomed the members of the Bar Association to the meeting and extended special greetings to Mr. Fred Eppenberger, St. Louis, President of the Missouri Bar Association.

Upon motion by Dr. Ivy, seconded by Dr. McAlhany, the minutes of the September meeting were approved as published in the *Bulletin*.

The President expressed special appreciation to Dr. Wm. F. Johnson for serving as Chairman of the Medical Society Division in the United Fund Drive this year which resulted again in 100 per cent participation of the members of this Society. He also expressed appreciation to the following members of the Society who assisted with the drive: Drs. Pruett, Dills, Klingner, Auner, Gose, Moseley, Lowe, Jr., Powell, Burkey, Clawson, Walker, Erwin Busiek, Maher and Key.

Dr. Tillman announced that unless there were objections, he would waive the balance of medical society business until the November meeting including presentation of the applications of Drs. Christy and Hollis. There were no objections. He then presented Dr. James T. Brown, a member of the Program Committee, who introduced Mr. C. Joseph Stetler, Legal Counsel and Director of the Socio-Economic Division of the American Medical Association, Chicago, Illinois, who discussed, "Growing Need for Medicolegal Cooperation."

Following the presentation and a question and answer period, Dr. Tillman expressed appreciation to Mr. Stetler for his appearance before this joint meeting.

The President announced that the November meeting of the Society will be held one week early, November 18, due to the Thanksgiving holiday. Vernon E. Wilson, M.D., Dean of the University of Missouri School of Medicine, will discuss, "The Future of Your Medical School" at this meeting.

Dr. Tillman also reminded those present of the importance of casting their ballot at the November 8 election. There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

NINTH DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

A dinner meeting of the Mid-Missouri Medical Society and the doctors' wives was held at the Three Rivers Cafe in Lebanon on Thursday evening, November 17.

The scientific program for the evening consisted of the showing of a film in color with sound entitled "Localization of Central Nervous System Lesions," from the University of Georgia Medical School. This film was made under the direction of R. E. Froelich, M.D., Department of Neuro-Psychiatry. Dr. Froelich is the brother of R. W. Froelich of Lebanon.

M. K. Underwood, M.D., *Secretary*

TENTH DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

The Butler-Ripley-Wayne County Medical Society met at the Northwold Restaurant at 6:30 p.m., November 17, 1960, for its regular monthly dinner meeting.

The guest speaker was Dr. Robert Ryan, St. Louis, who spoke on "Headaches." Dr. Ryan paid particular attention to the diagnosis and treatment of migraine and histamine causalgia. The program was well received by the members present. There were many questions in the question and answer period.

The meeting adjourned at 9:30 p.m.

E. T. Hansbrough, M.D., *Secretary*

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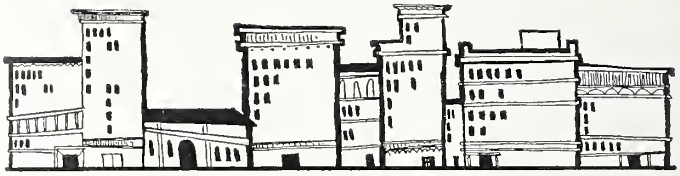
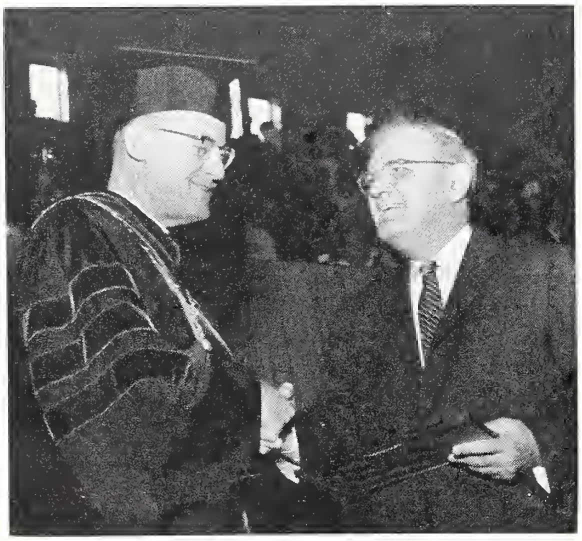
From the Medical Schools



ST. LOUIS UNIVERSITY

Honors

Dr. Goronwy O. Broun, professor of internal medicine at the St. Louis University School of Medicine, was awarded the alumni merit award as an outstanding graduate of the University at the Founders Day Convocation held Monday, November 14. The Very Rev. Paul C. Reinert, S.J., President of the University conferred the award upon Dr. Broun.



Dr. Goronwy O. Broun, professor of medicine, recipient of alumni merit award, is congratulated by the Very Rev. Paul C. Reinert, S.J., President of St. Louis University.

The University's traditional Founders Day celebration marked the 142nd anniversary of the establishment of the University. Alumni Merit Awards are given annually to graduates "who are exemplifying to an eminent degree in their daily lives the Credo of St. Louis University."

Dr. Broun's citation read as follows:

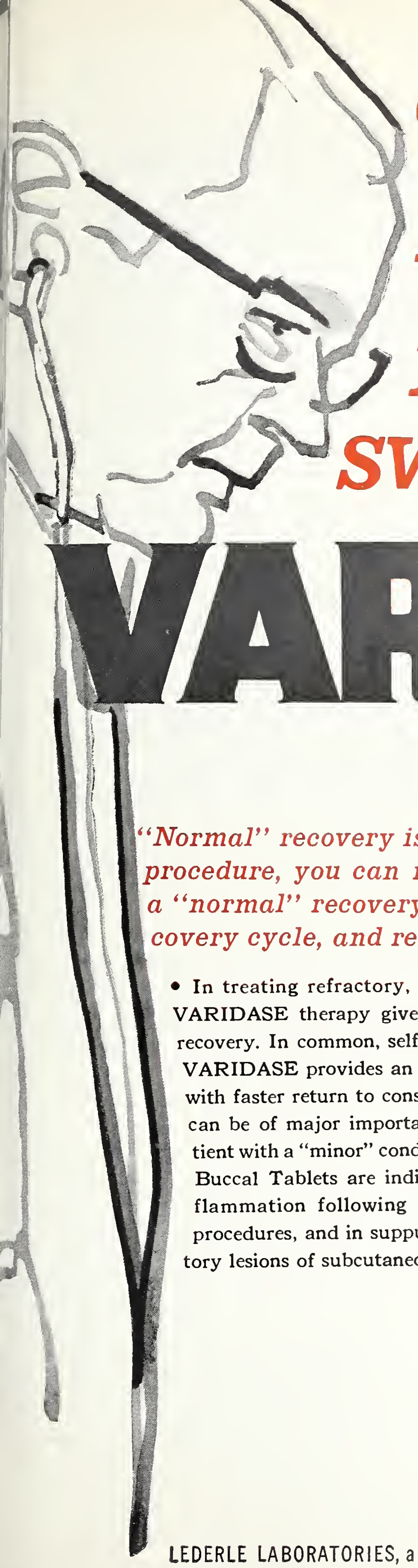
"Doctor Goronwy Owen Broun, Professor of Medicine at Saint Louis University, received his doctorate in medicine from the University in 1918. After internship at the Jewish Hospital in St. Louis, Doctor Broun served as a fellow and assistant at the Rockefeller Institute for Medical Research from 1920 to 1922, and as assistant in medicine at the Harvard Medical School at Boston City Hospital from 1922 to 1924. From that time Doctor Broun has been a member of the faculty of medicine of Saint Louis University.

"From 1933 to 1938 Doctor Broun's delineation of the epidemiology and clinical features of St. Louis encephalitis was a major addition of the knowledge of infectious diseases. In 1950 Doctor Broun established a collaborating laboratory with the World Health Organization Influenza Study Program for the study of influenza virus, and in 1956 the exhibit presenting the work of this laboratory received a Certificate of Merit from the American Medical Association. In 1957 with the outbreak of Asian influenza or influenza A epidemic, Doctor Broun's laboratory made significant contributions to the understanding of its world-wide epidemiology. In addition to his work in the field of virus diseases, Doctor Broun has advanced scientific knowledge in the areas of liver disease, anemia, nutrition, respiratory disease, and leukemia. He is the author of over one hundred scientific papers and his laboratory continues active investigation in infectious diseases and hematology.

"During these years his contribution to the education of thousands of young physicians is particularly noteworthy, and his advice and counsel have been a major factor in the advance of the School of Medicine. He has served the School of Medicine as secretary of the Hospital Board, as medical director of Firmin Desloge Hospital and the University's out-patient department, and director of department of medicine from 1954 to 1958.

"The University is deeply indebted and grateful to Doctor Broun for his dedication to teaching, research and patient care; as a mark of great esteem we recommend, Very Reverend President, Doctor Goronwy Owen Broun for the Alumni Merit Award."

Twenty-five year service awards were conferred upon nine members of the medical faculty. Recipients were: Dr. Robert J. Farrell, assistant in internal medicine; Dr. Samuel F. Freund, instructor in surgery; Dr. Leo J. Hartnett, assistant professor of clinical gynecology and obstetrics; Dr. Arthur A. Hines, assistant in



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neurology and psychiatry; Dr. R. Emmet Kelly, senior instructor in internal medicine; Dr. James M. Macnish, assistant professor of clinical urology; Dr. Stephen M. Tapper, assistant professor of clinical urology; Dr. Alvin E. Vitt, assistant professor of clinical urology, and Dr. William C. Weinsberg, instructor in surgery.

The Rev. Francis J. O'Reilly, S.J., vice president for development and public relations at Saint Louis University, greets three recipients of University Service Awards presented November 13, during Founders Day ceremonies. They are (from left) Dr. William C. Weinsberg, instructor in surgery; Dr. R. Emmet Kelly, senior instructor in internal medicine; and Dr. Stephen M. Tapper, assistant professor of clinical urology. With 11 other members of the faculty, each of the three has completed 25 years of service to the University.

Grant

Dr. Alfred W. Richardson, professor of physiology at the St. Louis University School of Medicine, has been awarded a grant renewal of $15,538 by the Office of Naval Research for research investigations on biological effects of microwaves of radar frequencies.

His research is aimed at finding out what physiologic and pathologic changes occur in animal tissues as a result of radar exposure. The purpose of the investigation is to insure safety to the thousands of people engaged in occupations at radar installations. Dr. Richardson is also attempting to determine whether radar frequencies might be used in physical medicine for the treatment of patients, when heat therapy is recommended by the family physician.

An unrestricted medical research grant of $5,000 was awarded to Dr. James P. King, director of the department of pediatrics, and Dr. Peter G. Danis, professor of clinical pediatrics, by Wyeth Laboratories. The grant will be used to finance research in pediatrics. The award, one of twenty granted annually to medical schools and hospitals by Wyeth Laboratories, was presented during a luncheon at the Cardinal Glennon Hospital for Children.

In the News

Dr. James W. Colbert, Jr., has been appointed a member of the Committee on Financing Medical Education of the Association of American Medical Colleges.

Dr. Henry Pinkerton, director of the department of pathology, participated in a symposium on "Toxoplasmosis and Uveitis" held in Washington, D. C., November 20, 21 and 22. The symposium organized by the Council for Research on Glaucoma and Allied Diseases is supported by the grant from the Alfred F. Sloan Foundation.

Dr. John P. Wyatt, professor of pathology, spoke on "Pathological Patterns in Disturbed Lung Function" before the hospital staff at Kansas University November 21.

Dr. James F. Dowd, senior instructor in surgery, was elected viee president of the Society for Plastic and Reconstructive Surgery at a recent meeting in Los Angeles.

Dr. Harry E. Oppenheimer, assistant professor of clinical medicine, spoke on "Diabetic Management During Complications" during the meeting of the American Diabetes Association held in Murphysboro, Ill. Dr. Oppenheimer is Councillor of the American Diabetes Association.

Dr. Elizah Adams, director of the department of pharmacology, has prepared an article on "Poisons" for the McGraw Hill *Encyclopedia of Science and Technology* published last Fall.

Dr. James M. Macnish, assistant professor of clinical urology, has been chosen president-elect of the St. Louis Medical Society.

UNIVERSITY OF MISSOURI

Television Program

Two Medical Center faculty members participated in a food additives symposium on Missouri Forum at 5:30 p.m. Nov. 13, on the University of Missouri Station KOMU-TV, Channel 8. Dr. Robert J. Jackson, chairman of the department of pediatrics, presented the medical viewpoint of the discussion, "Are Food Additives Endangering Our Health?," and Dr. Thomas D. Luckey, chairman of the department of biochemistry, was co-moderator.

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Dr. O. L. Kline, director, Division of Nutrition, Food and Drug Administration, Department of Health, Education and Welfare, Washington, D. C., appeared as guest panelist in the discussion.

Other panel members, all of the University of Missouri, were Dr. Robert N. Goodman, associate professor of horticulture, who discussed the uses of additives in foods of plant origin; and Dr. Rodney L. Preston, associate professor of animal husbandry, who spoke from the viewpoint of the animal food industry.

Forum moderator was Dr. Edward C. Lambert, assistant to the president in charge of television and professor of journalism. Dr. Kline spoke at the biochemistry seminar in the Medical Center the following day.

Assistant Dean

William D. Mayer, M.D., of the University of Rochester School of Medicine and Dentistry, New York, has been appointed assistant dean of the University of Missouri School of Medicine and will assume the position June 1, 1961, President Ellis has announced.

The appointment of Dr. Mayer, who will also hold the title of assistant professor of pathology, has been approved by the Board of Curators.

Dean Vernon E. Wilson of the School of Medicine said that as the assistant dean Dr. Mayer will have charge of student affairs for the School of Medicine. He will handle the various functions of the Dean's Office relating to medical student loans, admissions, guidance, and similar matters, and will be chairman of the Medical School Admissions Committee.

Dr. Mayer, who at present is a senior instructor in pathology at the University of Rochester School of Medicine and Dentistry, has had extensive experience in working with students, Dean Wilson said. In 1951-52, while holding a fellowship in the division of preceptorial studies at Colgate University, Hamilton, N. Y., he was connected with college freshmen guidance at the University. He had received his A.B. degree from Colgate University in 1951.

Dr. Mayer entered the University of Rochester School of Medicine and Dentistry in 1952, and in 1954-55 was a student fellow in pathology there.

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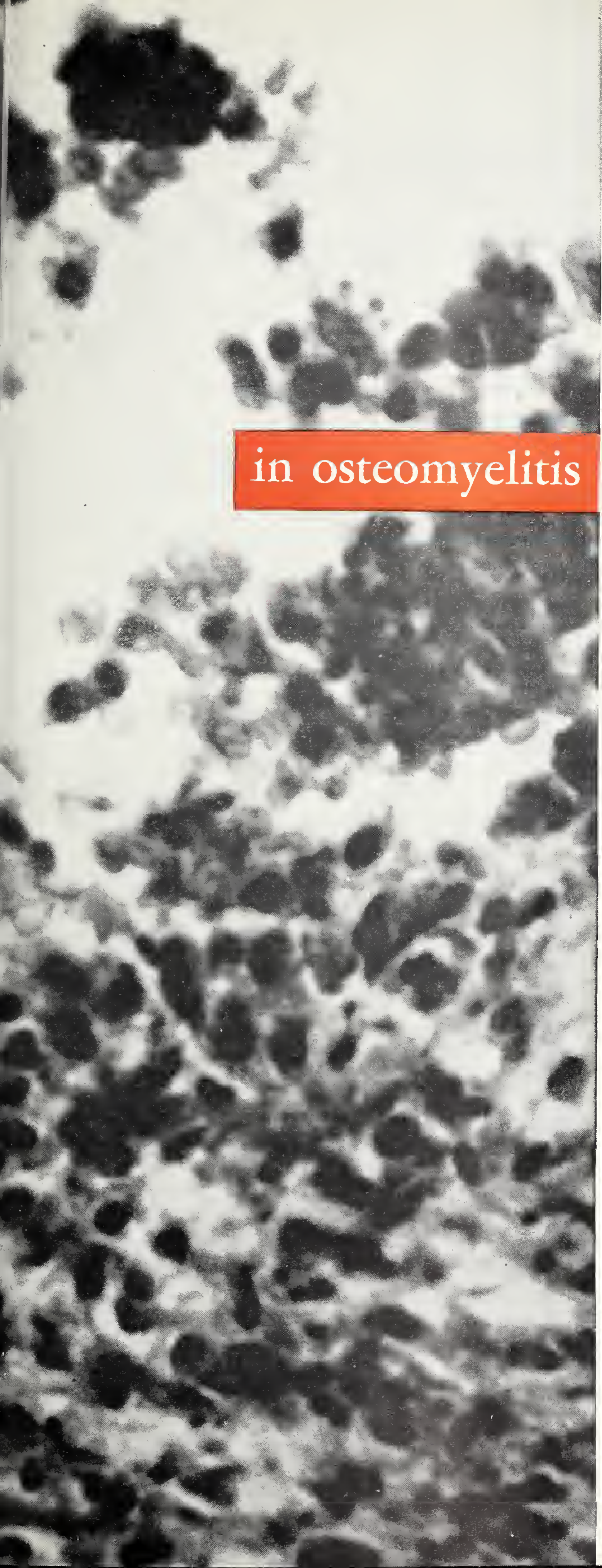
*J.A.M.A. 163: 359, 1957 (Feb. 2)



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He received his Doctor of Medicine from the University of Rochester School of Medicine in 1957, and served there as intern during 1957-58. During 1958-59 Dr. Mayer was an assistant in pathology at Rochester, and in 1959-60 he has been first instructor in pathology and Junior Buswell Fellow in pathology and then senior instructor in pathology and Junior Buswell Fellow in pathology.

Dr. Mayer interrupted his work as a student at Colgate University to serve in the United States Marine Corps from September, 1946, to August 1948.

He is a member of Alpha Omega Alpha, national medical honor society; Sigma Xi, science research society; the International Academy of Pathology; and the American Association for the Advancement of Science.

Medical Center Guests

Dr. Helen Nahm, Dean of the University of California School of Nursing visited the University of Missouri School of Nursing at the Medical Center November 14. Dr. Nahm, an outstanding alumna of the University of Missouri School of Nursing, consulted with faculty in the field of graduate education and discussed current trends in graduate education in nursing at a meeting held in the Medical Center Auditorium. The meeting was attended by nurses and other interested persons in allied fields.

Trips and Talks

Dr. Vernon E. Wilson, Dean and Director of the University of Missouri Medical Center, gave a talk at the Sunday morning session of the Missouri Academy of General Practice meeting, November 5 through 6 at the Chase Hotel in St. Louis. "Growth and Development of the Family Physicians," was the general topic for discussion. Members of the academy attended.

Dr. Frank B. Engley, Jr., professor and chairman of the department of microbiology and acting chairman of the department of public health and preventive medicine, left October 28 for San Francisco to attend the national meetings of the American Public Health Association from October 29 to Nov. 4. He participated in meetings of the Teachers of Public Health and Preventive Medicine, and took part in a meeting of the Committee on Germicides of the American Public Health Association and presented a paper entitled "Criteria for the Selection of Germicides" at the Laboratory Section meetings. While in the San Francisco area, he visited the Naval Biological Research Laboratories in Oakland and

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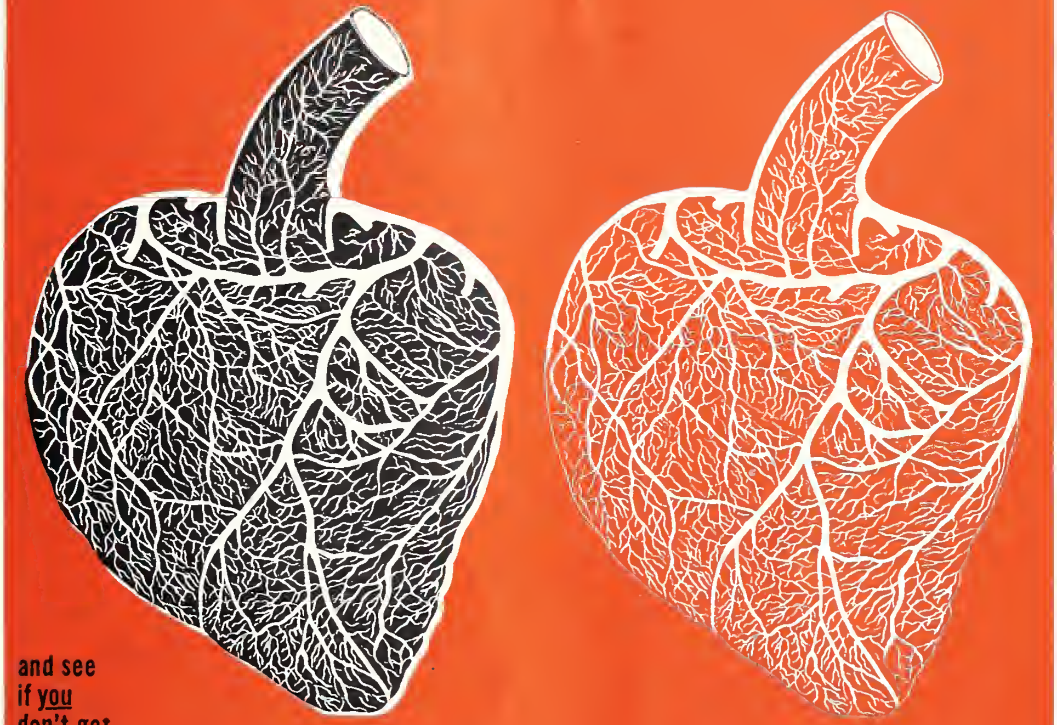

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the Army Area Laboratories at the Presidio and the Departments of Bacteriology and Microbiology at the University of California in Berkeley, School of Medicine in San Francisco and at the new School of Medicine of Stanford in Palo Alto.

Dr. E. W. Lowrance, professor of anatomy, attended a meeting of the Council on Medical Television entitled, "Teaching With Television, an Institute for Medical Educators," at the University of Florida Medical Center, Gainesville, on October 27-28. The meeting was concerned with the current problems and technics of educational television and included several helpful illustrative demonstrations. The general topic for discussion was teaching with television, intramural or closed circuit problems and technics, scrambled image extramural T.V.

Dr. Robert L. Jackson, professor and chairman of the department of pediatrics, Dr. Clement E. Brooke, associate professor of pediatrics, Dr. James M. Pickens, instructor in pediatrics, and Dr. Fikri M. Hanna, assistant professor of pediatrics, attended the meeting of the Midwest Society in Pediatric Research in Milwaukee, Wisconsin, November 2-3. A paper by Drs. Pickens and Jackson, "Values for the Standard Oral Glucose Tolerance Test in Healthy Children Without a Family History of Diabetes," was presented along with approximately 25 other scientific reports.

Dr. Robert L. Jackson attended the Food and Nutrition Board meeting; and the Committee meeting on Recommended Dietary Allowances; and as Chairman presented a report of the Infant Nutrition Committee to the Food and Nutrition Board. The meeting was held in Washington, D. C., November 4-5.

Dr. Kenneth K. Keown, professor of surgery (anesthesiology) presented "IM Pent and Regional Anesthetics" in Galveston, Texas, at the University of Texas Medical Branch, November 3. He also presented "Pre-Op Anesthetic Survey of Patient" at Parkland Memorial Hospital, Department of Anesthesia, on November 1. Parkland Memorial is in Dallas, Texas.

Dr. H. S. Goldberg, associate professor of microbiology, attended a Leptospirosis Research Conference accompanied by Dr. D. Blenden, assistant professor of Veterinary Bacteriology and Parasitology at the University in Chicago, November 29 to December 1. This annual meeting is established for investigation, to discuss informally, their progress in studying the various

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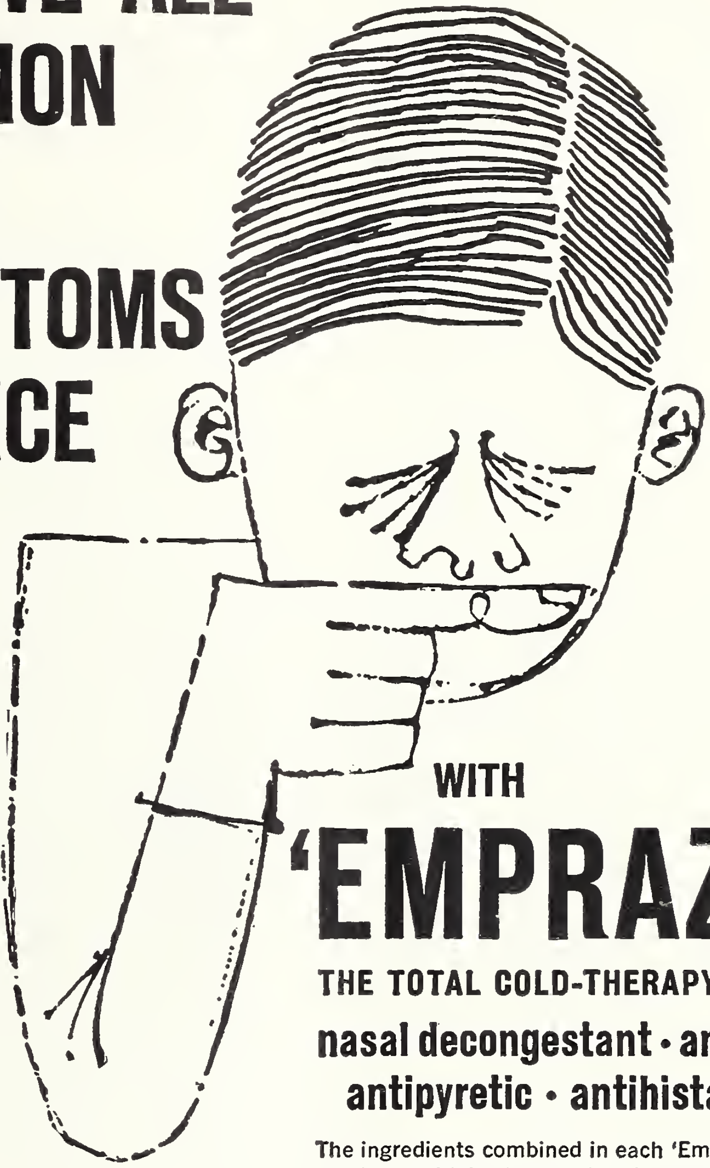

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aspects of Leptospirosis, a bacterial disease of man and animals. Drs. Goldberg and Blenden were recipients of a grant from N.I.H. to support their work in this area.

Dr. Michael H. Ivey, assistant professor of microbiology at the School of Medicine, presented two papers dealing with research on trichomonas vaginalis, a parasite often causing inflammation of the vagina in women, at the meeting of the American Society of Tropical Medicine and Hygiene Nov. 2-5 in Los Angeles, Calif. The first paper, entitled, "Possible Strain Variations in Trichomonas Vaginalis," deals with variations on the organism that might affect its ability to cause disease. The second paper, entitled "Growth Characteristics of Trichomonas Vaginalis in Solid Media," describes growth of the organism in solid media and possible applications in research.

Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department, attended various meetings of the American Psychiatric Association general meeting in Washington, D. C., October 28-29. He discussed the program for the following year at the Committee on Aging meeting, including participation in the 1961 White House Conference on Aging. Dr. Weiss also attended the meeting of the Chairmen of Departments of Psychiatry of all American medical schools, discussing undergraduate and graduate programs of psychiatric education in medical schools. He was appointed Chairman of an American Psychiatric Association Task Force to Study Integration of Psychiatric Gerontology into Residency Training Programs (in preparation for a national conference on psychiatric education to be held in 1961 or 1962). Dr. Weiss was first of a series of guest lecturers delivering talks to all professional employees of the Veterans Administration in the state of Iowa in Knoxville, Iowa, November 4. About 12 lectures will be given throughout the year. His paper, "The Predictability of Suicide," discussed recent research by Dr. Weiss and others involving quantitative analysis of certain statistical trends and personal characteristics of individuals who attempt or commit suicide, and relating these trends and characteristics to the seriousness of the attempt or act.

Dr. Hugh E. Stephenson, Jr., professor of surgery, gave several talks at the Pan Pacific Surgical Association meeting in Honolulu, Hawaii, from September 27 to October 5. He spoke on the "Use of Cortisone in Treatment of Acute Pancreatitis," the "Transplacental Metastasis of Malignant Tumor Cells" before the obstetrics and gynecology section, and participated in an "Open Heart Surgery for Congenital Heart Disease" panel with Dr. C. W. Lillehei, Dr. J. V. Maloney, Jr., Dr. H. Ehrenhaft and Dr. Donald B. Effler. Dr. Stephenson also spoke on "New Advances in Cardiac Resuscitation" at a Fireside Conference of the American Heart Association national meeting in St. Louis October 21. He participated in a panel with Dr. Paul Zoll, Dr. Osler Abbot, Dr. Frank Spencer and Dr. James Jude.

WASHINGTON UNIVERSITY

Cornerstone Laying

Cornerstone laying ceremonies took place in November at the new $3,415,886 David P. Wohl, Jr. Memorial-Washington University Clinics building in the Washington University-Barnes Hospital Medical Center. Principal participants were Mrs. David P. Wohl; Dr. Edward W. Dempsey, dean of the Medical School; Judge James Douglas, chairman of Washington University's board, and Washington University Chancellor Ethan A. H. Shepley. A luncheon in the dining room of David P. Wohl, Jr. Memorial Hospital preceded the ceremonies. Occupancy of the 12-story clinics building, situated at 4950 Audubon Avenue, east of the David P. Wohl, Jr. Memorial Hospital, has been tentatively set for March, 1961. Most of the construction funds are being provided by the Wohl Foundation and Mr. and Mrs. David P. Wohl, through a $2,000,000 donation made prior to Mr. Wohl's death last March. The structure is named for the Wohl's son, Air Force Lt. David P. Wohl, Jr., who was killed in 1944 in a bombing raid over Germany. Other major contributions include $100,000 from the Kresge Foundation to permit further development of the out-patient training program for medical students; a $743,328 grant from the health research facilities division of the United States Public Health Service, a grant of $115,689 in federal funds under the Hill-Burton Act, a $10,000 gift from Sunnen Products Co. of St. Louis and medical school reserve funds. An easement granted by the Wabash Railroad made construction of the building possible.

Grants

Washington University School of Medicine was awarded $5,000 by the Damon Runyon Memorial Fund for Cancer Research, Inc., in a November check-presentation ceremony at the Medical School. H. J. Gibbons, mid-west representative of the Damon Runyon Fund, and executive assistant to the general president of the International Brotherhood of Teamsters, presented the check to Dr. Edward D. Dempsey, dean

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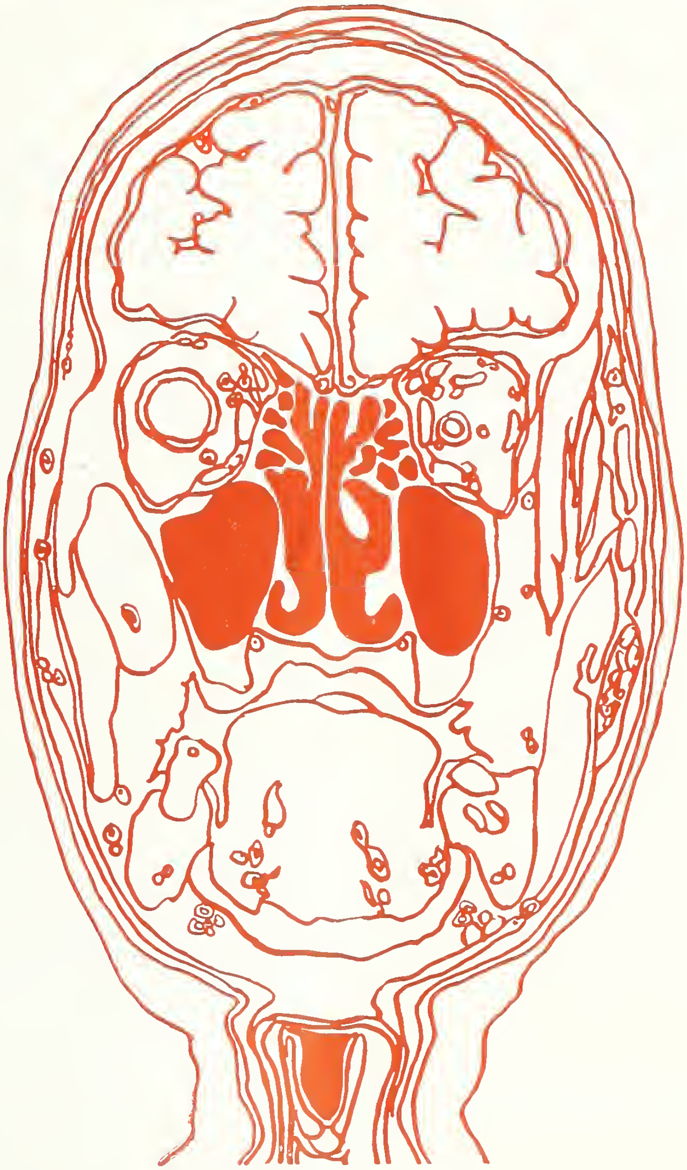

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of the medical school. The grant will be administered by Dr. Harvey Butcher, cancer co-ordinator and director of the division of tumor services at the Washington University-Barnes Hospital Medical Center. Funds will be initially used to investigate certain methods of administration of chemotherapeutic agents for cancer. The $5,000 grant represents a major portion of funds raised at a recent charity dinner held in St. Louis by the Teamsters, with the Damon Runyon Fund as beneficiary. St. Louis hospitals and universities have received $170,740 from the Damon Runyon Fund since its organization in 1946, following the death of the world renowned journalist and short story writer for whom the Fund is named.

Dr. John E. Kirk, associate professor of medicine at Washington University School of Medicine, has been awarded a $9,934 new research grant from the United States Public Health Service. Funds will support systematic studies of the enzyme systems in normal and arteriosclerotic tissue.

New Psychosomatic Unit

A six-bed unit for the treatment and study of psychosomatic illness in children was opened in November at St. Louis Children's Hospital in the Washington University-Barnes Hospital Medical Center. Children receiving care in the new unit will be those in whom emotional disorders or behavior are intermingled with physical disease or symptoms. Treatment will be the joint responsibility of staff pediatricians and psychiatrists under the direction of Dr. Alexis F. Hartmann, Sr., professor and head of the Department of Pediatrics; Dr. James Anthony, Blanche F. Ittleson professor and Chairman of the Division of Child Psychiatry, and Dr. Paul Painter, instructor in clinical pediatrics and child psychiatry. The new unit is being financed in part by a three-year grant from the Children's Research Foundation, an organization founded by a group of St. Louis businessmen. Residents will participate in the program through a gift from the Dr. Herbert A. Mazur Children's Fund.

Lectures

Drs. Anthony P. Fletcher, William H. Danforth, Edward Massie, Albert Roose and Robert M. O'Neal, all of Washington University Medical School, presented research papers at the thirty-third scientific session of the American Heart Association held last fall in St. Louis.

Washington University participants in the Eighth Congress Program of the Pan-Pacific Surgical Association held last fall in Honolulu, Hawaii, were Dr. Willard M. Allen, professor of obstetrics and gynecology, and Dr. J. Otto Lottes, assistant professor of orthopedic surgery. Dr. Allen discussed infertility and participated in a panel on virilizing syndromes. A research paper on delayed and non-union of long bones was given by Dr. Lottes.

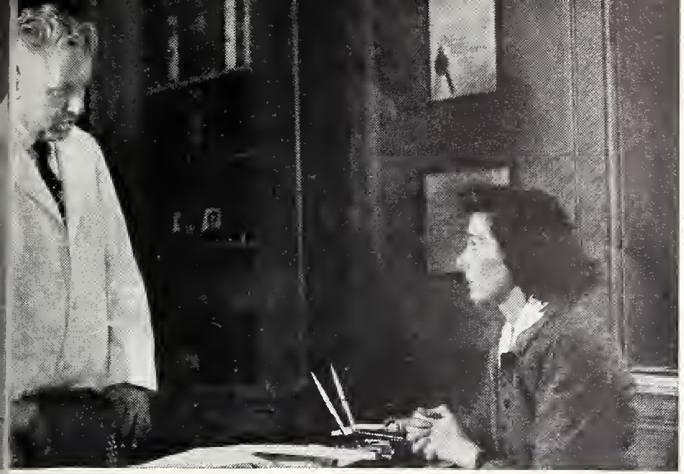
Dr. Herbert Rosenbaum, assistant professor of clinical neurology, discussed home care for the multiple sclerosis patient and tolbutamide at the 1960 annual meeting of the St. Louis Area Chapter of the Multiple Sclerosis Society.

Dr. Eli Robins, professor of psychiatry, was guest speaker at the fall meeting of the March of Dimes industrial gifts division. He discussed the expanded research program of the New March of Dimes.

Dr. Lawrence Kubie, professor emeritus of psychiatry at Yale University and director of training at Sheppard and Enoch Pratt Hospital, Baltimore, lectured to the department of psychiatry and neurology staff in November.

First Mazur Fellowships Awarded

Four residents in pediatrics at Washington University School of Medicine have been awarded the first Herbert A. Mazur fellowships. The fellowships will support each doctor's training in the field of emotional disturbances of children during the regular third year of residency training in pediatrics at St. Louis Children's Hospital. Those receiving the awards and the school from which they received the medical degree are: Dr. Irving E. Allen, Jr., Duke University Medical School; Dr. Eugenia Pierce, St. Louis University Medical School; Dr. Mabel Pukerson, Medical College of South Carolina; and Dr. Malcolm Garber, University of Louisville School of Medicine. The Dr. Herbert A. Mazur Children's Fund was incorporated in August of 1959, following the unexpected death of the 40-year-old St. Louis pediatrician for whom the Fund is named. The field of emotional disturbances of children was one of Dr. Mazur's major interests.



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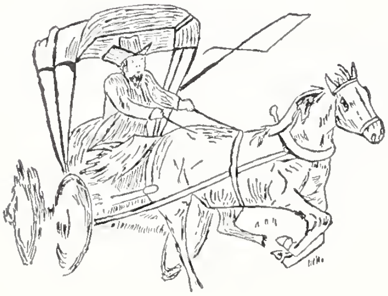
Missouri Medicine in Review



FORTY YEARS AGO

The recent epidemic of typhoid fever at Salem, Ohio, where 650 cases and many deaths occurred from accidental pollution of the water supply of the city, has called the attention of the entire country to the dangers of insanitary conditions. Epidemics of typhoid fever have recently occurred in a number of Missouri cities and towns traceable to polluted water supplies.

Dr. H. E. Pearse, Kansas City, was elected vice president of the Western Surgical Association at the meeting held in Los Angeles, December 4.

Dr. H. G. Wyer, St. Louis, has accepted a commission in the Medical Corps of the regular Army with the rank of major, and is now stationed at Ft. Sheridan, Illinois.

Dr. G. E. Scrutchfield, formerly of Marshall and later superintendent of State Hospital No. 4 at Farmington, has been commissioned a major in the Medical Corps of the regular Army. At present he is located at Station Hospital, Camp Grant, Rockford, Ill.

A case of anthrax in a man living near Chillicothe has been the subject of comment against the use of new shaving brushes without immunization was proved justifiable when it became known that the patient had contracted the disease from a new shaving brush.

TWENTY-FIVE YEARS AGO

Dr. Walter Fredman, Washington, D. C., was a guest of the Jackson County Medical Society at Kansas City on November 19. More than a hundred fifty attended the dinner meeting. Dr. Fredman delivered an address on "The Endocrine Glands and Personality."

The seventh annual meeting of the Medical Association of the Missouri Pacific Railroad will be held in Omaha, Nebraska, January 31 and February 1. Dr. A. H. Hamel, St. Louis, is president of the organization and Dr. J. A. Lembeck, St. Louis, is secretary.

The Missouri State Board of Health has appointed an advisory committee to assist in planning and carrying out the provisions of the Social Security Act relating to public health in Missouri. The committee consists of Dr. E. Lee Miller, Kansas City, President, Missouri State Medical Association; Dr. R. H. Miller, St. Louis, representing the State Dental Association; Miss Grace Frauens, Kansas City, representing the State Nurses' Association; Dr. Dudley S. Conley, Columbia, Dean, University of Missouri School of Medicine; Father Alphonse M. Schwitalla, S.J., Dean, St. Louis University School of Medicine; Dr. W. McKim Marriott, St. Louis, Dean, Washington University School of Medicine.

Harper & Brothers, New York, has announced that they have acquired the medical book publishing business of Paul B. Hoever, Inc., New York. The first book published under the Hoeber imprint was Ehrlich's "Specific Therapeutics" which appeared in 1909.

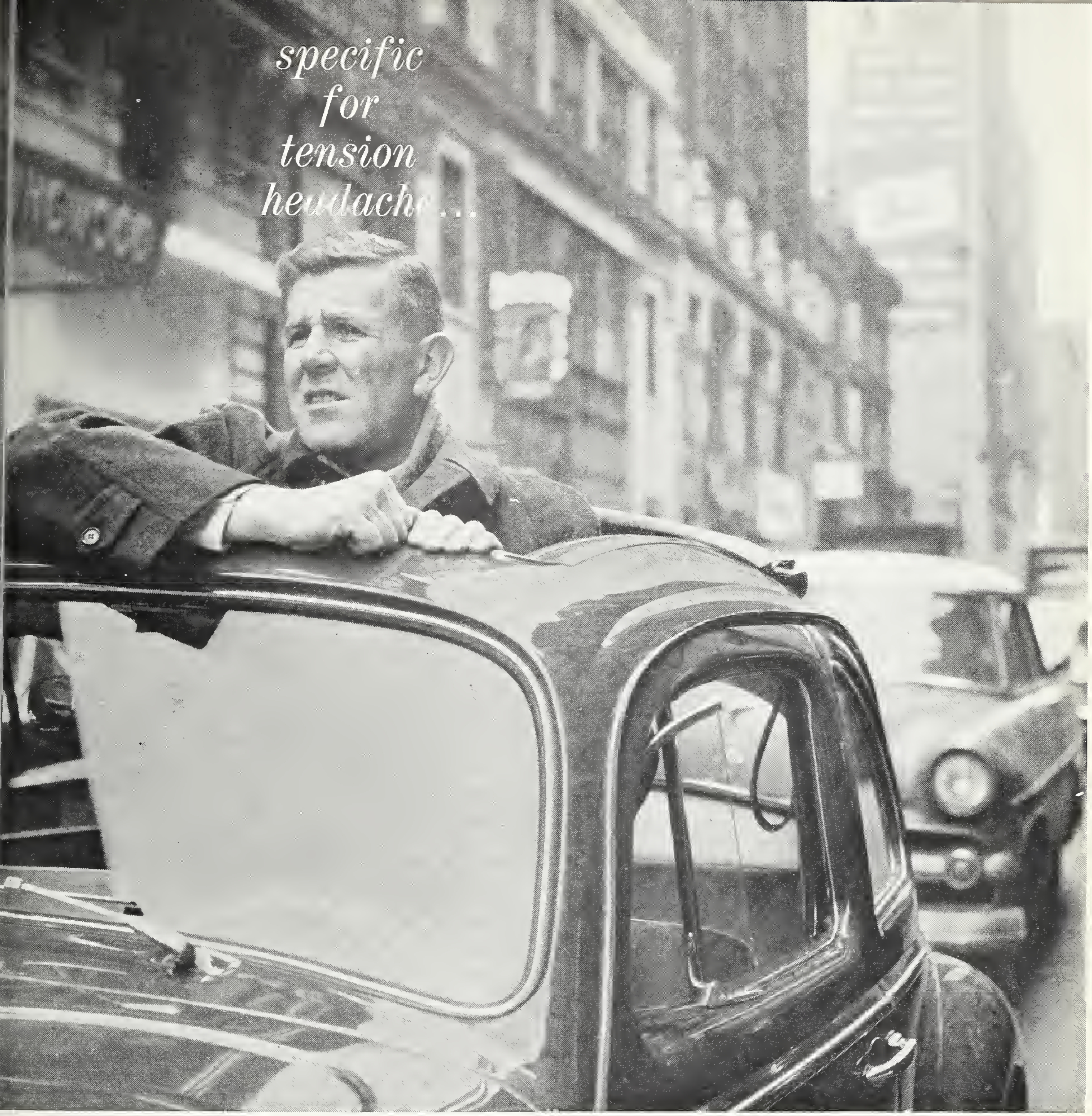
TEN YEARS AGO

Alfred Goldman, M.D., St. Louis, will speak at a postgraduate course in diseases of the chest sponsored by the Southern Chapter of the American College of Chest Physicians in cooperation with Vanderbilt University School of Medicine to be held in Nashville, Tenn.

Richard E. Johnson, M.D., Columbia; Eugene M. Bricker, M.D., and Edwin C. Ernst, M.D., St. Louis, were speakers at a meeting of the consulting staff of the Ellis Fischel State Cancer Hospital on December 3.

Changes in the Social Security Act approved by the Congress of the United States during 1950 take effect January 1, 1951. At present the physician employer deducts 1 per cent of his employee's wages on the first $3,000.00 earned. He then matches that with a like amount.

Thirty-five physicians attended an afternoon and evening meeting of the Sixth Councilor District at the Bothwell Hotel, Sedalia, on November 30. The Pettis County Medical Society served as host at a pleasant social hour between afternoon and evening sessions. A steak dinner touched off the evening program followed by pertinent discussions on medical society problems.



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Friedman, A. P., and Merritt, H. H.: J.A.M.A. *163*:1111 (Mar. 30) 1957.

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Dosage: 1 or 2 every four hours, according to need, up to 6 per day.

SANDOZ

Results of the Treatment of Tuberculosis Before And Since the Introduction of Chemotherapy

Tuberculosis Abstract

The prognosis of many forms of tuberculosis is greatly improved when at least two drugs are administered for a period of eighteen months. Relapse is also less frequent than in the prechemotherapy era.

The abstract is furnished by the National Tuberculosis Association and is from an article by H. E. Pugsler, M.D.; E. A. Allen, M.D.; O. T. Cheung, M.B.; H. S. Coulthard, M.B., and G. L. Gale, M.D., which appeared in the *Canadian Medical Association Journal,* August 27, 1960.

The proper administration of chemotherapy has led to a striking improvement in the outcome of the treatment of tuberculosis. If, however, patients with active disease have received inadequate chemotherapy, the cure rate will be lower and the relapse rate higher. All new cases of active tuberculosis, irrespective of the site, should receive combined continuous chemotherapy for about 18 months or longer. Bed rest is indicated during the early active phase and, in certain selected cases, surgical measures are also necessary.

Three antimicrobial agents have proved to be of great value, namely, isoniazid, streptomycin, and para-aminosalicylic acid (PAS). It is generally agreed that these drugs should not be prescribed alone, but should be given in a combination of at least two. If any one of them alone is prescribed to a patient with open cavitary disease, the tubercle bacilli in the host rapidly develop resistance to the drug, so that it is no longer effective in combating the tuberculous infection. If, on the other hand, two or all three of the antimicrobial agents are given concurrently, the development of resistance by the tubercle bacilli to the drugs administered is markedly delayed, and the drugs continue to be effective in combating the infection for a much longer period.

Isoniazid Essential

Although there is not much difference in the effect of the different combinations, it is generally agreed that isoniazid should be one of the drugs given. It has established itself as the most powerful agent in the treatment of tuberculosis.

In assessing the results of the modern treatment of such a chronic disease as tuberculosis, we are handicapped by the fact that adequate chemotherapy, as we know it, has been in use for little more than seven years—insufficient time for an adequate long-term follow-up. However, since relapses usually occur within a period of five years, the results here reported should be a fair indication of the ultimate prognosis.

Before antimicrobial therapy was available, the mortality rate of active pulmonary tuberculosis was estimated to range from 5 per cent in minimal cases to 20 per cent in moderately advanced disease and to 70 per cent in far advanced. The majority of patients with persistent cavitation died within five years.

Modern treatment has resulted in a striking reduction in mortality and relapse rates. At the Toronto Hospital for Tuberculosis we have analyzed the results of treatment of all patients with active pulmonary tuberculosis who were admitted to that hospital in 1953, who had sputum positive for tubercle bacilli, who had not been given antimicrobial therapy before, and who were administered streptomycin, isoniazid, and PAS continuously for at least nine months.

The average duration of triple-drug therapy given to the 140 patients in the series was 17 months.

At the end of five years, six patients had died, or 4 per cent of the total. All the deaths were in the far advanced group. With adequate chemotherapy, and resectional surgery where indicated, the mortality was strikingly reduced as compared with the prechemotherapy estimates of from 5 per cent (minimal) to 70 per cent (far advanced).

Of the 25 cases of minimal tuberculosis in the series, 100 per cent had attained inactive status by the end of two years, while 97 per cent of 61 moderately advanced cases had become inactive by the end of three years, and 81 per

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cent of 54 far advanced cases had become inactive by the end of three years. (Inactive, as defined by the National Tuberculosis Association, means that the following conditions had been met for at least six months: repeated examinations of the sputum or fasting gastric contents are negative for tubercle bacilli on culture; the chest radiographs have remained stable in appearance, and there is no evidence of cavitation.) It is evident that if cases of minimal or moderately advanced disease are adequately treated with drugs, one can be confident that the process will in almost all cases become inactive within two years. With far advanced disease, however, a favorable outcome is less certain.

Relapses

In an attempt to find out how many patients relapse after attaining an inactive status, 125 of the 140 cases were followed from two to five years. It was found that 4 per cent had relapsed in the period of follow-up. In a series of 900 cases treated without chemotherapy, or inadequate chemotherapy, reported by the Veterans Administration Hospital, Memphis, Tenn., 30 per cent had relapsed at the end of three years. The 4 per cent figure has also been reported by the Fitzsimons Army Hospital, Denver, for 2,500 patients adequately treated with drugs and followed from one to five years.

It must be noted that the presence of a persistent cavity in the lung is always a great menace to the patient, whether he has had chemotherapy or not. The presence of a cavity in the lung that has failed to close after six to eight months of chemotherapy is the cardinal indication for surgical resection.

In the Toronto Hospital series, pulmonary resection was performed in 31 cases, or 22 per cent. The resection was segmental in 20 cases; a lobectomy was performed in 10 cases, and a pneumonectomy in one case. All these surgically treated cases became inactive; there were no deaths, but one relapse occurred.

Adequate chemotherapy in bone and joint tuberculosis has resulted in a marked reduction in mortality, more rapid subsidence of active disease, decrease in length of hospital stay, and marked reduction in relapse rate. Nearly half the cases are discharged with movable joints.

Four groups of cases of renal tuberculosis have been followed. In the first group of 82 patients who had neither chemotherapy nor nephrectomy, 58 per cent died of tuberculosis. In the next group of 347 cases treated by nephrectomy but without chemotherapy, 46 per cent died of tuberculosis. Inadequate chemotherapy in 175 cases led to a moderate reduction of mortality, but in the last group of 163 cases, adequate chemotherapy resulted in a striking reduction in the mortality to 1 per cent and a relapse occurred in only 1 per cent of this group.

Summary

The outcome of modern treatment has been compared with that before the use of chemotherapy. Although the follow-up period is not long enough for final assessment, it is evident that combined continuous administration of isoniazid with PAS or with streptomycin, or all three drugs, for 18 months or longer, has resulted in a striking reduction in the mortality rate and improvement in the relapse rate.

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Curiosa et Trivia

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In the twenty years following 1936, surgeons' fees increased 59 per cent; general practitioners' 72 per cent; dentists' 82 per cent; shoe repair 135 per cent; and hospital room rates 264 per cent. The increase in hospital room rates has the dubious honor of being the largest of any service listed in the *Consumer Price Index*.

Capsule Clinics

- Facial edema following dermabrasion can be materially lessened by administration of 5000 μ chymotrypsin prior to surgery and on the first and second postoperative day. Robinson, M.D., Med. Ann. Dist. Columbia **29**:496, 1960.

- Mer-29 effectively lowered serum cholesterol in 88 per cent of hypercholesteremic patients. Goyette, E. M., and Elder, J. C., Am. Heart J. **60**:536, 1960.

- Cytological examination failed to reveal anomalies of nuclear sex in 16 male and 20 female schizophrenics with marked deviation from normal on the basis of the androgyny score. Cowie, V., et al., British M. J. **2**:431, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

MILLS-KERR LAW

Physicians are being urged to cooperate fully to get their states to participate as soon as possible in the new federal-state program for medical care of the needy and near-needy older persons.

The medical profession also has been alerted to the dangers of relaxing its opposition to tying in medical care of the aged with Social Security. It is thought probable that the Kennedy Administration will try in 1961 to get Congressional approval of such legislation.

E. Vincent Askey, M.D., President of the American Medical Association, pointed out to the Washington clinical meeting of the A.M.A. House of Delegates that proponents of the Social Security approach had a pledge of support from the successful Democratic candidate for President.

A few days following the A.M.A. meeting, Sen. Harry F. Byrd (D., Va.), Chairman of the Senate Finance Committee which handles Social Security legislation, reiterated his opposition to a compulsory medical care plan under Social Security. He said: "I am opposed to the (Democratic party) platform recommendation for compulsory medical service and hospitalization under the Social Security system. I am convinced this would lead to socialized medicine with the possibility that it would bankrupt the Social Security trust fund. This matter came before the Finance Committee and was fought out in the post-convention session of Congress last August. The Senate voted 51 to 44 in opposition to the Democratic platform proposal, and instead adopted a fair plan for medical service and hospitalization for those in need of it."

Dr. Askey urged that all county and state medical associations provide "the medical leadership necessary to implement the Mills-Kerr bill, the new federal-state program, as rapidly as possible." The House of Delegates of the A.M.A. adopted such a resolution.

"We must put forth a sincere and concentrated effort during the coming year to make the Mills-Kerr law effective, to show that it can, practically as well as potentially, solve the problem of medical care for the aged," Dr. Askey said.

COMPULSORY HEALTH INSURANCE

It is estimated that more than 5,000 college and university students will take part in the 1960-61 National Intercollegiate Debate program. Subject for the debates will be the proposition: That the United States should adopt a program of compulsory health insurance for all citizens.

The discussion question was chosen through an annual poll of debating coaches throughout the country by the Committee on Intercollegiate Discussion and Debate of the Speech Association of America. Each student engaged in the intercollegiate debate must learn both sides of the question. Champions from leading universities will compete in a national contest at the United States Military Academy, West Point, N. Y., next spring.

FOREIGN INTERNS

Foreign interns who failed medical examinations last September may remain in this country until at least next July 1. In cooperation with the State Department, the A.M.A. agreed to extend for six months a January 1 deadline for dismissal of foreign interns unless they pass the examinations through the Educational Council for Foreign Medical Graduates.

The failing interns will be given another opportunity to take the examinations in April. Meantime, they must be taken off patient care and their hospitals must set up training programs for them.

The A.M.A. Council on Medical Education and Hospitals said that this policy would be carried out judiciously and that occasional exceptions would be granted where circumstances warranted.

INSURANCE COVERAGES INCREASED

Payments for coverages average three times that of ten years ago, according to *Insurance Economics Surveys.*

Business and industrial firms paid an average of $328 in premiums per employee for pension plans, life insurance and accident and sickness insurance in 1959, based on a survey of 1,064 corporations by the U. S. Chamber of Commerce.

This was a 15 per cent increase over the $284 payment per worker reported by the survey of 1957 costs for such fringe benefits and more than twice the payments for insurance and pension coverages ten years ago.

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Across
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Missouri Congressmen

United States Senators from Missouri are Edward V. Long, Clarksville, and Stuart Symington, 5 Berkshire, Richmond Heights 17, with the Washington address being Senate Office Building, Washington 25, D. C.

United States Representatives from Missouri, with a Washington address of House Office Building, Washington 25, D. C., are: District 1, Frank M. Karsten, 2521 University St., St. Louis 7; District 2, Thomas B. Curtis, 462 Florence Ave., Webster Groves 19; District 3, Mrs. Leonor K. Sullivan, 2303 Minnesota, St. Louis 4; District 4, William J. Randall, 942 S. Main, Independence; District 5, Richard Bolling, 648 W. 59th Terr., Kansas City 13; District 6, W. R. Hull, Jr., R. F. D. 1, Weston; District 7, Durward G. Hall, M.D., 2442 S. Fremont, Springfield; District 8, Richard H. Ichord, Houston; District 9, Clarence Cannon, Elsberry; District 10, Paul C. Jones, 300 W. Washington, Kennett; District 11, Morgan M. Moulder, Camdenton.

Missouri General Assembly

Senator Albert M. Spradling, Jr. (Dem.), Cape Girardeau, was named President Pro Tem of the Senate. Hilary A. Bush became Lt. Governor to fill the term of former Lt. Governor Edward V. Long, who resigned when elected United States Senator. Senator John W. Joynt (Dem.), St. Louis, was elected Majority Floor Leader and Senator Jack Curtis (Rep.), Springfield, was elected Minority Leader. In the Senate there are 28 Democrats and 6 Republicans.

In the House, Thomas D. Graham (Dem.), Jefferson City, was elected Speaker, and William A. Geary, Jr. (Dem.), St. Louis, was named Speaker Pro Tem.

James G. Trimble (Dem.), Kearney, is Majority Floor Leader, and Dorman L. Steelman (Rep.), Salem, is Minority Floor Leader.

The Committee on Public Health and Safety of the House is composed of John F. Baber, Richmond, Chairman; J. J. Wimp, Kirksville, Vice Chairman; J. McKinley Neal, Kansas City; Joseph W. Beckerle, St. Louis; Frank E. Kostron, St. Louis; Harry Keller, Kansas City; V. M. Baltz, Eminence; M. E. Bauer, Kansas City; Ralph Wigfield, Chillicothe; Basil V. Jones, Pleasant Hill; Luke A. Knese, St. Louis; Tom F. Baker, Essex; William R. Brazelton, Kansas City; George J. Germain, Illmo; Luther Arnold, Reeds Spring; Fred R. McMahon, Fairfax; C. Fajen, Cole Camp; Oscar L. Marsh, Aurora; W. R. Henry, Camdenton; Harry R. Hale, Potosi; Clint A. McKuin, Fisk.

The Senate Committee on Public Health and Welfare is composed of Albert M. Spradling, Jr., Cape Girardeau, Chairman; Lee Aaron Bachler, Anderson; Michael Kinney, St. Louis; William B. Waters, Liberty; Theodore D. McNeal, St. Louis; John J. Johnson, Affton; William J. Cason, Clinton; Sorkis J. Webbe, St. Louis; William E. Hilsman, St. Louis; A. Basey Vanlandingham, Columbia; Maurice Schechter, Creve Coeur; Jack S. Curtis, Springfield; James P. Kelly, Trenton.

Former Governor Points Out Need for Revenue

In his final address, former Governor Blair stressed the fact that one of the most difficult problems would be the raising of sufficient revenue to meet rapidly expanding state government needs. He noted that full implementation of the mental health program and the full financing of the revised school foundation program would "require revenues beyond those we can expect from present sources." He did note the increased income tax collections resulting from stronger enforcement.

A recent survey study "Increasing Cost of Missouri State Government" reported in Handbook of Missouri State Taxes by the Missouri Public Expenditure Survey substantiates the statement concerning raising sufficient revenue. The survey revealed that the state government's biennial appropriations have increased by nearly a billion dollars in the last two decades. Appropriations have increased from $211 million 20 years ago to $1.2 billion in the current biennium, more than a five fold increase.

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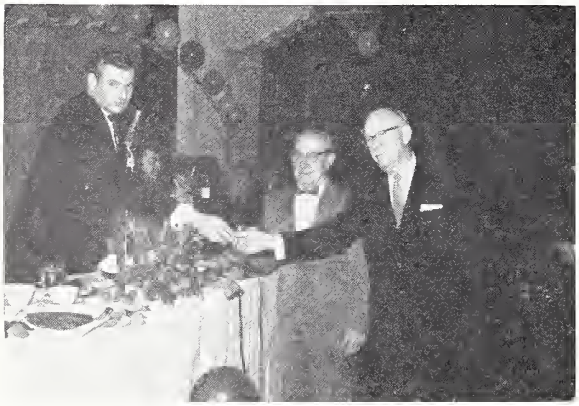
Missouri Academy of General Practice

Approximately 235 people including Academy members, their wives and guests attended the annual Installation Dinner-Dance of the St. Louis Academy of General Practice held at the Missouri Athletic Club on Saturday night, December 3. The evening festivities began with a social hour at 7:00 p.m. The call for dinner was given at 8:00 p.m. with the formal evening program immediately following. At the conclusion of dinner, President Eugene Hall extended greetings to all present and introduced those seated at the head table. He then introduced the new officers for 1961. They are, reading left to right in the accompanying picture: Drs. Eugene Edele, Vice President; Vernon Michael, President; Eugene Hall, Outgoing President; Lois Wyatt, Secretary; Richard Jotte, Treasurer; and Wilbur Mullarky, President-Elect.

New officers of the St. Louis Academy of General Practice pose for picture.



Doctors were recognized for 50 years of practice.

After expressing appreciation to the entire St. Louis Academy membership and particularly to the committees and fellow officers, Dr. Hall presented the gavel to incoming President Vernon Michael. Dr. Michael then presented Dr. Hall with an honorary Past-President's plaque.

Dancing followed the dinner.

Dr. Hall presented the gavel to Dr. Michael.

Dr. Hall was the 14th president of the St. Louis Academy. As the newly installed President, Dr. Michael discussed briefly some of the happenings concerning the Academy and its members during 1960 and mentioned a number of problems and things to be done which lie ahead.

An interesting and appropriate addition to this

(Continued on page 187)

in infectious disease[17,22,30,36]
in arthritis[18,19,20,29]
in hepatic disease[2,3,4,5,38]
in malabsorption syndrome[1,2,6,27]
in degenerative disease[6,7,19,20,40]
in cardiac disease[23,28,29,38,41]
in dermatitis[24,39]
in peptic ulcer[8,21,38]
in neuroses & psychiatric disorders[25,26]
in diabetes mellitus[31,32,33,38]
in alcoholism[9,11,35,37,38]
in ulcerative colitis[10,14,16]
in osteoporosis[13,19,20]
in pancreatitis[15]
in female climacteric[12,34]

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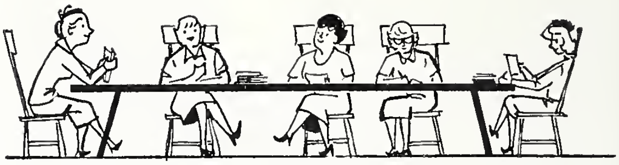

We like to think of the State Medical Association Convention as a kind of homecoming where all the great medical family of the state meets for a reunion. It may seem premature to write in February about a convention which will be held the 19th of March, but I read some good advice once upon a time which went something like this: "The best way to get things done is to do them before you are ready to do them." At our house, where the months seem to be only as long as weeks should be (not that we are sorry that time will pass so quickly, for we are hungry for the sight of tulips cracking the earth in their struggle to reach the light of day), we knew that the six weeks intervening between now and the convention in Kansas City will simply evaporate.

Mrs. Jordan Kelling

Although we may not be ready to do it yet, it is not too early to be putting aside various items of wearing apparel to be tucked into the suitcase, to line up the baby sitter, and to make hotel arrangements. And it is not too early to start crossing our fingers that no emergencies will arise which will prevent our doctors' joining the convention activities in Kansas City.

Our state conventions are friendly affairs. There are many reunions with old friends not seen since last convention, and the meetings should also be regarded as opportunities for making new friends whom we shall look forward to seeing again each year.

Our Auxiliary will enjoy the meetings, the luncheons, the social affair being planned for Sunday night by the M.S.M.A., and to the Past Presidents' Dinner on Tuesday night.

"Now is **the time for all good men to come to the aid. . . ." We often laugh when this old practice line is quoted, but let us be sober about it. There never was a time when it was more imperative for the doctors to come to the aid of their country than now. Truly, it is the patriotic duty of the doctors of the United States to come to the aid of this glorious land of opportunity and free enterprise.**

Lately, many attitudes have come to be regarded as "corny" or "square." Among the things which have become "corny" is any display of patriotism; but we have been thinking that a surge of patriotic zeal would be a grand personal experience that would make us lift up our heads, take an immense breath of air into our lungs, and make us feel really alive.

What about this group of men, the doctors of the nation—are they qualified to know the real needs of the country? Let's take a hurried look at their qualifications.

First of all, the doctors are a highly educated group of men. In small, isolated communities, the doctor often forms an outpost of learning and scientific knowledge. Before a man has been permitted to study medicine his qualifications and his ability have been carefully appraised. Here are men endowed with the capacity to learn, to understand, and to evaluate.

There is probably no individual who works more closely with people, with all kinds of people, than the doctor. He is present when an old friend slips away from this life; he is there when a new life is brought into this world; he is kneeling at the edge of a highway over the mangled body of a young man hurt in a motor crash; he hears the coughs and cries of sick and injured children; he must inform a wonderful person that the person has cancer. He works with the families and friends of these victims of disease and accident, and knows their thoughts. All the day long the doctor sees fear and courage, joy and despair, worry and relief. He deals with the young and the old, the rich and the poor, those who are sick, and those who are healthy and come for routine physical examinations. He knows what is good for a great majority of the people, for he knows the people in all conditions of life. He should make his opinions known, and his opinions should be highly regarded by the people of the United States.

We have been told that the money spent by the public each year for unprescribed vitamins amounts to 350 millions of dollars. In most cases, this money is needlessly spent, since an adequate diet will provide all vitamin requirements. An additional 250 million dollars are spent each year on "uranium pads," "super-aspirin," and an endless list of similarly useless items. The American Medical Association has set up a Commis-

(Continued on page 187)

Volume 58, Number 2—February, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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CAMPBELL C. McCULLOUGH, JR., M.D., *Kansas City*

Diabetic Neurotrophic Ulcers of the Feet

Surgical Correction by Wedge or Pie-Resection

Four case reports are presented illustrating the feasibility of limited excision rather than amputation of the foot or leg or prolonged plastic procedures for diabetic neurotrophic ulceration of the plantar area of the foot.

I have had occasion to see four cases of rather severe diabetic neurotrophic ulceration of the plantar aspect of the foot.

Observation of the approach to this problem made by others, and discussion of the matter with some, has led me to believe that at times a limited excision of the lesion may not be thought of as a practicable feasible approach to this problem, and that amputation of the foot or leg or prolonged plastic procedures may be thought to be necessary. I have found that this lesion responds well to a limited excision of the area.

Topical treatment directed to the ulcer bed is of no avail. Treatment with cross leg flaps causes prolonged bed confinement because of the plaster immobilization of both lower extremities.

After wedge resection the wound tends to heal without undue delay, and this even though the resection may be carried out in an area of neurotrophic anesthesia.

The guiding principle, to my mind, is that the underlying mechanical causation of the skin breakdown in the particular area of the sole under consideration in any given patient must be obviated. Specifically, the head of the metatarsal underlying the ulcer must be resected, along with the necrotic tissue present.

The bone structure in this area is frequently involved by bacterial invasion and by neurotrophic changes. The toe may be left, but it is more satisfactory to resect the toe and metatarsal, in its distal two thirds. The wound is closed per primum, with one or two deep sutures, no subcutaneous sutures and the usual non-absorbable skin closure, that is, silk or nylon.

The skin sutures are removed in about two weeks' time. The halves of the distal foot are coapted by compressive manipulation at the time of closure before and while the sutures are being placed, and by application of an elastic bandage dressing.

Case Reports

Case 1. Mrs. E. F. W., white, female, age 50 years, had had diabetes for approximately 16 years. She customarily took about 45 units of NPH insulin daily; did not watch her diet, and weighed about 270 pounds at the time of her foot difficulty.

The history immediately related to the foot difficulty is as follows:

In January, 1953, she stepped on a piece of glass and ran it into the sole of her left foot. The patient stated that because of "poor circulation" she did not know that she had stepped on the glass until the foot became sore and inflamed. She noted soreness in the dorsal aspect of the foot. She said that a piece of glass was removed from the sole of her foot.

The patient stated that the small incision made to remove this piece of glass did not heal, and gradually enlarged until an ulcer the size of a 25 cent piece was present in the sole of the foot.

The patient underwent conservative treatment for another 18 months without any noticeable change in the status of the ulcer.

In January of 1956, the foot was operated upon (figure 1). Ulceration developed in the sole of the right foot at a later date, over the head of the second metatarsal, and a similar resection was carried out with a similar result.

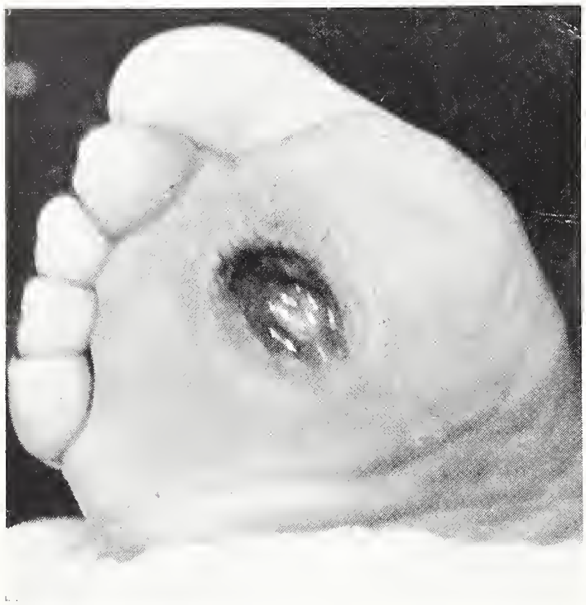

Fig. 1. Typical diabetic neurotrophic ulceration of plantar aspect of foot.

Case 2. Mrs. H. Y., white female, aged 59 years was known to have had diabetes for 10 years. The patient had been standardized on 28 units of NPH and 80 units of regular insulin.

About eight months prior to admission to the hospital the patient developed an ulcer on the plantar aspect of the foot, in the region of the second metatarsal bone.

The head and neck of the second metatarsal bone, together with the second toe, along with the ulcer, was resected; the metatarsal bone was resected through its distal two thirds. The closure was done with manipulative coaptation of the two portions of the foot during and after closure. An attempt was made to maintain this coaptation by application of an Ace bandage as a postoperative dressing.

The wound healed promptly and within three weeks' time the patient was bearing weight.

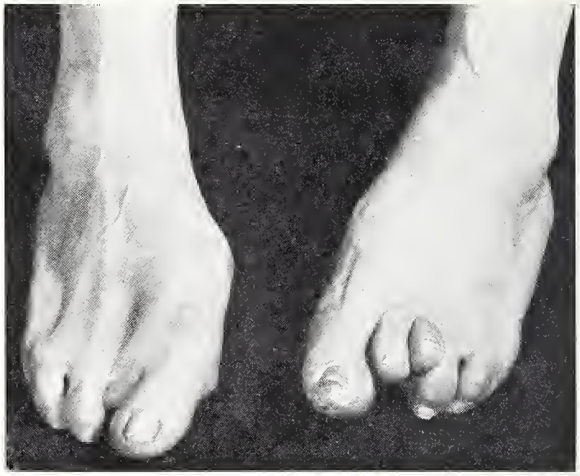

Fig. 2. Right foot operated upon with resection of second and third toes and distal metatarsals. Left foot operated upon with resection of second and third metatarsal, leaving toes. Result in right foot is obviously superior.

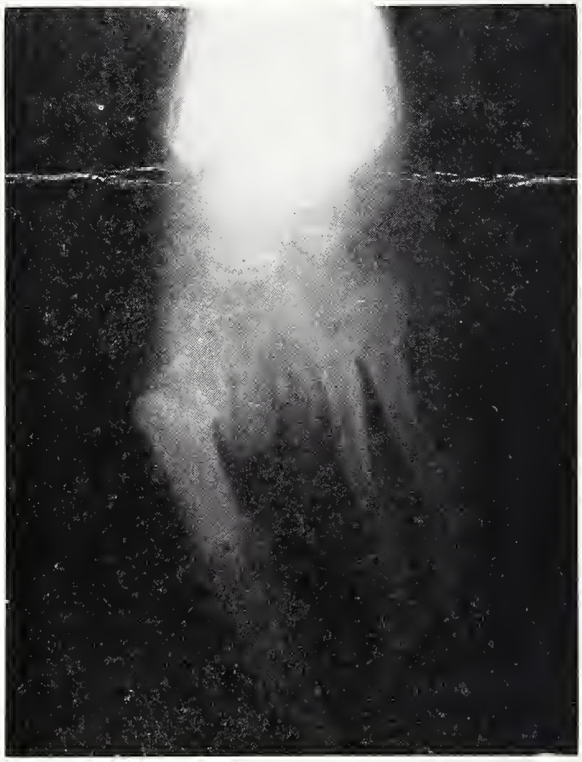

Fig. 3. Roentgenogram of foot showing extent of metatarsal resection.

The wound has remained healed and the patient has had no further difficulty with the foot.

Case 3. Mrs. A. C. was known to have had diabetes for many years and the disease was controlled poorly by diet and insulin.

A large diabetic neurotrophic ulcer of the plantar aspect of the left foot developed over a period of about six months, and a large diabetic neurotrophic ulcer of the other foot had developed over a period of about the same length of time.

The second foot was operated on approximately three weeks after the first foot was operated on.

The feet healed without any remarkable complications and a satisfactory result was obtained in this case.

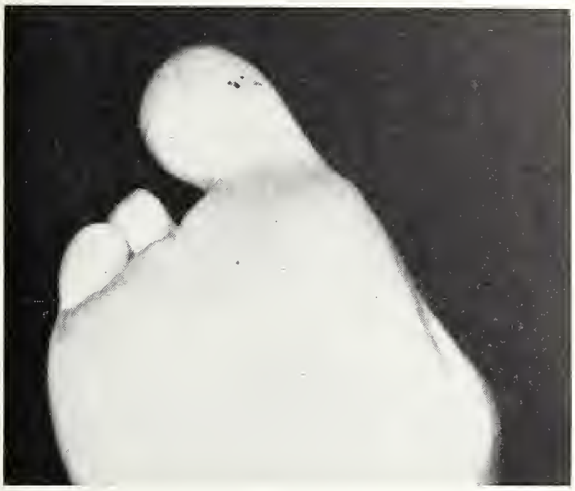

Fig. 4. Plantar aspect of foot whose radiograph comprises figure 3. This foot has been subject to normal usage.

Case 4. Mrs. G. S., white, female, aged 55 years, was known to have had diabetes for 25 years. Sixteen months prior to hospital admission the right middle toe became infected and was amputated.

The patient had a well developed ulceration of the plantar aspect of the foot in the region of the head of the second metatarsal bone of the right foot, with the ulceration extending down to the tendons.

This patient had had a recognized neuropathy of the lower extremities for a matter of several years time.

There had been a marked diminution in pain and touch sensibility in the lower extremities for several years. There was present also a definite loss of vibratory sense in both lower extremities, which had been present for several years.

"Diabetic cataracts" had been removed, from one eye in 1943 and from the other eye in 1946.

About six months prior to admission she developed a callus on the plantar aspect of the foot, and about three weeks prior to admission some "fluid" developed beneath the callus, and not long after that there appeared to be some "hemorrhage in the area." The area soon commenced to drain and developed into an open ulceration.

The operative procedure in this instance consisted in the resection of the second and third metatarsals in their distal portions, together with amputation of the two toes and a closure of the wounds per primum with manipulative coaptation of the two portions of the foot, during and after closure. The after closure manipulative process was carried out simply by application of an Ace bandage.

Because of the severe neuropathy in this case, it was not necessary to use any anesthetic whatsoever to carry out the operative procedure. The patient was not aware of any discomfort during the operative procedure.

The wound healed promptly and per primum, and permitted weight bearing in about three weeks time.

SUMMARY

Wedge or pie-resection of a portion of the foot is a practical, efficient method of treating diabetic ulceration of the foot.

Lesions tend to heal fairly promptly after such resection.

The areas do not tend to breakdown.

A satisfactory weight-bearing foot is obtained.

Ambulation with crutches is permitted in a few days after surgery, and graduated weight bearing is permitted in about three weeks.

There is little residue of disability from the amputation per se.

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MICHAEL BERNREITER, M.D., ***Kansas City***

Perforation of the Interventricular Septum Following Acute Myocardial Infarction

Report of a Case With Phonocardiogram and Antemortem Diagnosis

THE DIAGNOSIS of septal rupture frequently can be established or at least suspected on the basis of a new, loud systolic murmur and progressive heart failure in the presence of myocardial infarction.[1, 2, 3] Rarely patients survive for days or even months following septal rupture.[4] One case of survival for five years has been reported.[5]

Perforation of the interventricular septum occurs in only 1 to 2 per cent of deaths from myocardial infarction.[6]

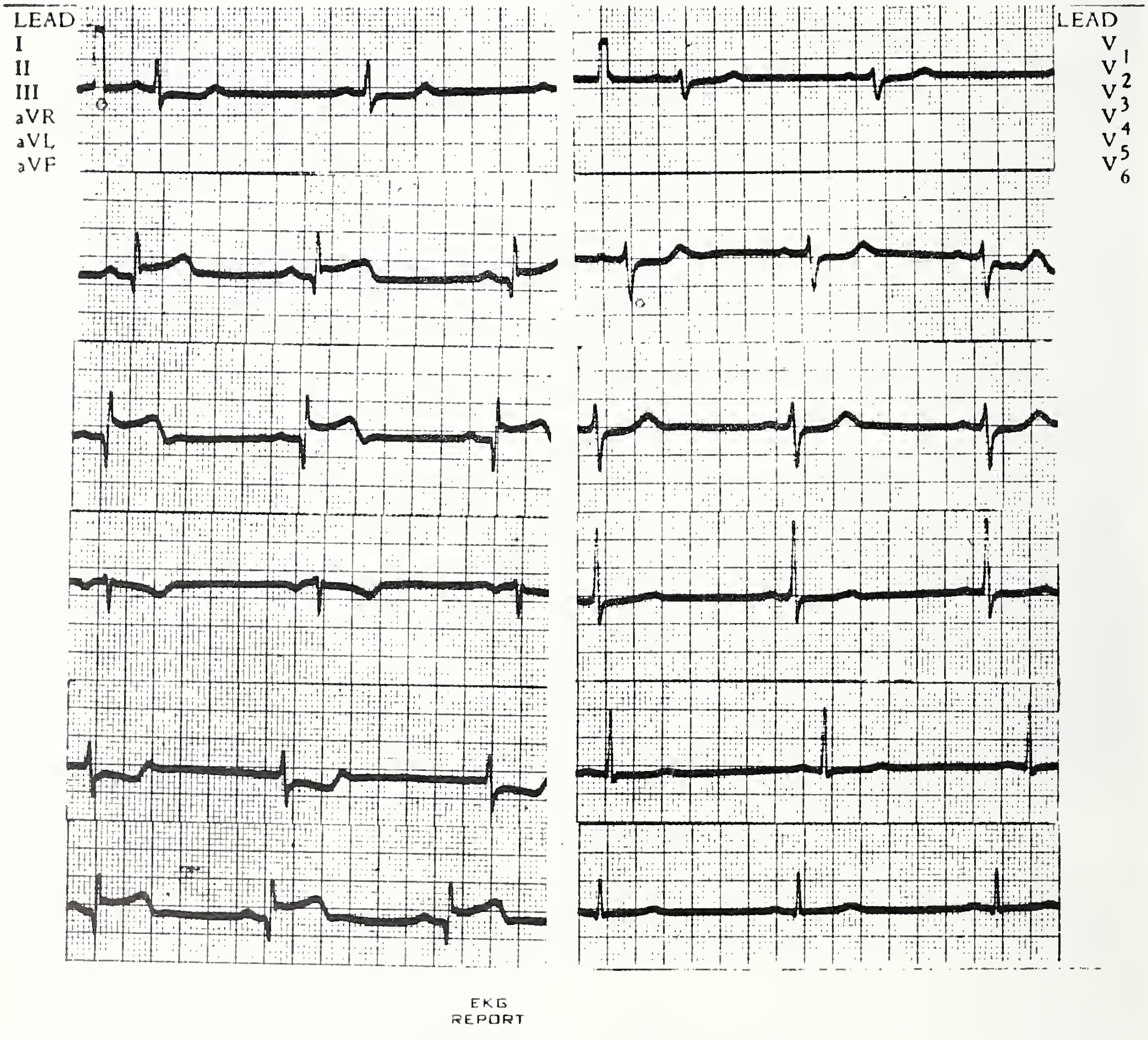

Fig. 1. Electrocardiogram taken one hour after admission to the hospital. Acute posterior myocardial infarction.

While diagnosis of septal rupture of the interventricular septum following acute myocardial infarction can be made frequently based on a loud systolic murmur and progressing heart failure in the presence of myocardial infarction, no record was found in the literature including phonocardiographic findings. A case is reported, including these findings.

From the Department of Electrocardiography, St. Mary's Hospital, Kansas City, Missouri.

The purpose of this paper is to present an additional case of perforation of the interventricular septum following acute myocardial infarction with antemortem diagnosis. The report includes changes in the electrocardiogram, a phonocardiogram taken approximately two weeks before death and the autopsy findings.

CASE REPORT

A 60 year old man entered the hospital with chest pain which started about 2:00 a.m., four hours before admission. He had had similar attacks previously but never as severe or as long lasting. The pain did not extend to the neck or to either arm.

On physical examination his blood pressure was 140/90. The pulse was regular and 90 per minute. Lungs were clear. Heart tones were distant and no murmurs were heard. The liver was not palpable and there was no peripheral edema. An electrocardiogram taken one hour after admission (fig. 1) showed a sinus mechanism with a rate of approxi-

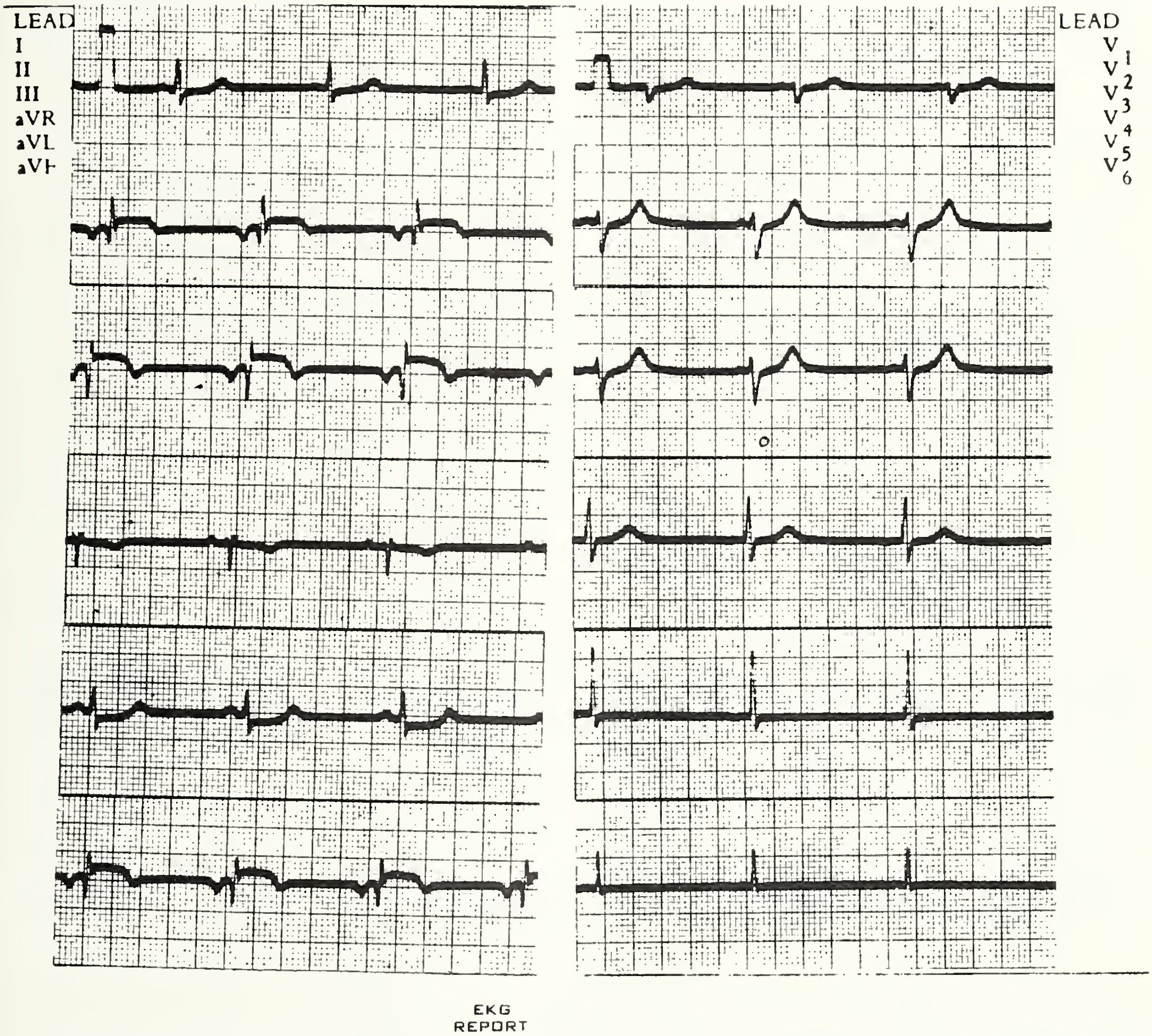

Fig. 2. Electrocardiogram taken on the eighth day of hospitalization. Posterior myocardial infarction. AV nodal rhythm.

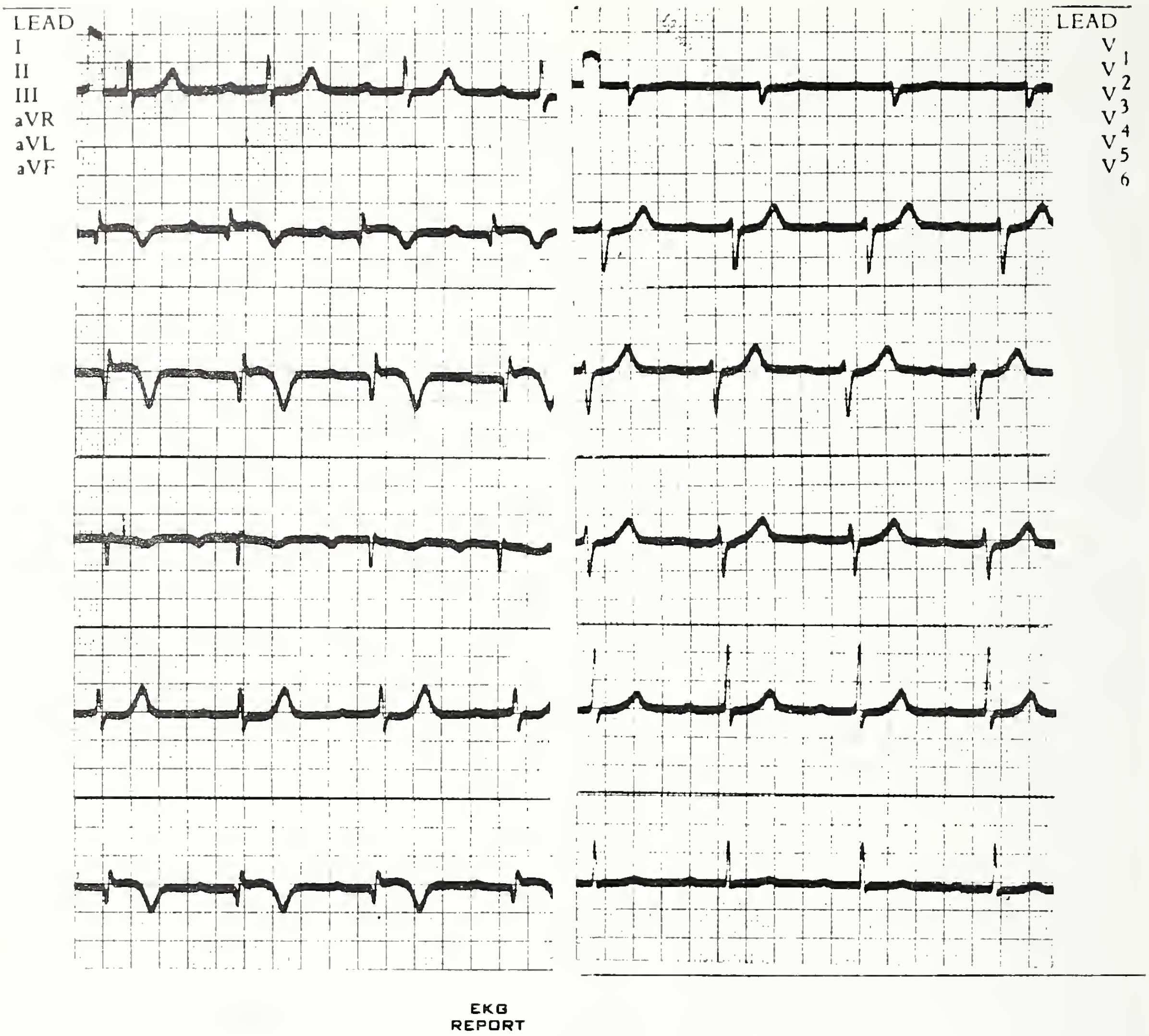

Fig. 3. Electrocardiogram taken on the fourteenth hospital day. Posterior myocardial infarction. First degree AV block.

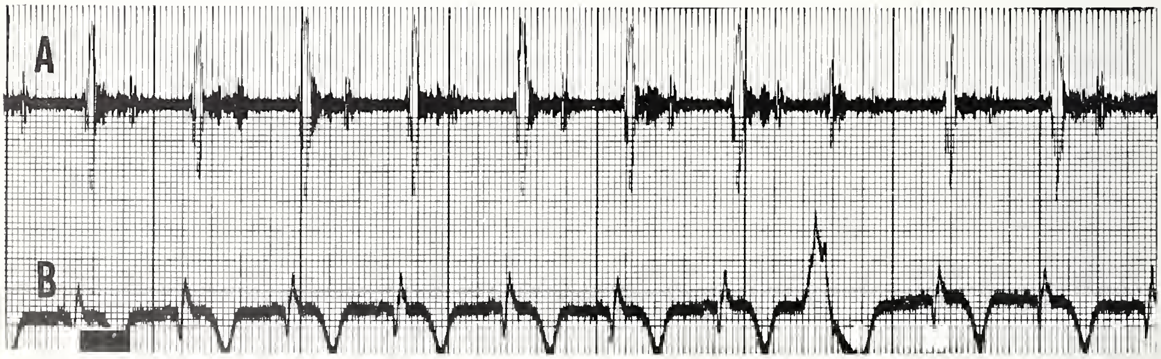

Fig. 4. Phonocardiogram taken on the fifteenth hospital day after a loud systolic murmur became apparent. The upper tracing (A) plainly shows the systolic murmur. The lower tracing (B—Lead II) continues to show the pattern of posterior myocardial infarction. One ventricular premature contraction is seen. The AV conduction time appears accelerated. The first degree AV block (see fig. 3) has disappeared.

mately 46 per minute. The PR interval was 0.20 second; rather deep Q waves and ST segment elevations were present in Lead II, Lead III and aVF with reciprocal changes in Lead I, aVL and in some of the precordial leads. These findings were interpreted as showing an acute posterior myocardial infarction.

The patient was put on oxygen and demerol, 50 mg., as needed for severe pain. He was kept at complete bed rest and anticoagulation therapy was started. He made a satisfactory response and was free of pain about 48 hours later. On the eighth day after admission the patient felt quite well, he had no discomfort and oxygen was discontinued at that time. His prothrombin time varied between 30 and 36 seconds or two to two and one half times the control. The electrocardiogram was repeated on that day (fig. 2) and showed a characteristic evolution of the pattern of posterior myocardial infarction. The ST segments remained elevated and the T waves were sharply inverted in Lead II, Lead III and aVF. An upper AV nodal rhythm was then apparent.

On the evening of the fourteenth hospital day the patient complained of shortness of breath and some chest pain. Physical examination revealed a regular heart rhythm. The first heart tone was extremely distant. No murmur was heard and there was no friction rub. Blood pressure was 130/80. Electrocardiogram (fig. 3) then showed a sinus mechanism, a first degree AV block and the pattern of a recent posterior myocardial infarction with ST segments still slightly elevated and the T waves sharply inverted in Lead II, Lead III and aVF.

The following morning the patient complained of increasing dyspnea and the physical examination revealed a loud systolic murmur with palpable thrill, loudest in the third and fourth left intercostal space. The murmur was transmitted to the apex. Diagnosis of ruptured interventricular septum was made and a phonocardiogram was taken at the bedside (fig. 4). Lead II was run simultaneously with sound tracing, and it was interesting to note that the first degree AV block had disappeared; in fact the AV conduction time appeared to be accelerated. A single ventricular premature contraction was also seen in this lead. In the phonocardiogram the heart sounds were identified without difficulty. A systolic murmur, changing somewhat in character and lasting throughout systole, was easily demonstrated.

From this point on the patient's condition deteriorated rapidly. A tachycardia of 120 developed, his blood pressure began to drop to a level of 70/40. Basal rales became apparent bilaterally. The patient was given 0.8 mg. of Cedilanid intravenously and this was repeated in about four hours. Levophed, 8 mg. in 1000 cc. of 5 per cent glucose in water, was started. There was no response to the treatment outlined and the patient expired about 10 hours after the systolic murmur was first noticed.

Autopsy.—The important findings were a recent posteroseptal myocardial infarction and perforation of the interventricular septum.

COMMENTS

The clinical diagnosis of rupture of the interventricular septum after myocardial infarction is relatively easy. A harsh systolic murmur not previously heard, and most pronounced in the third and fourth left intercostal space along the sternal border accompanied by a thrill is almost pathognomonic. In the case reported the rupture occurred approximately on the fourteenth day after the acute coronary episode. An adequate prothrombin time was maintained up to the time of death. An interesting finding was the development of a first degree AV block which apparently disappeared after septal perforation.

CONCLUSIONS

1. Perforation of the interventricular septum after acute myocardial infarctoin is not too common, but the diagnosis is relatively simple.
2. The electrocardiogram taken a few hours before perforation showed a first degree AV block which apparently disappeared after interventricular rupture.
3. It appeared worthwhile to report this case because search of the literature did not reveal report with phonocardiographic findings after interventricular septal perforation.

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L. R. SANTE, M.D., ***St. Louis***

The Changing Character of Pulmonary Infections

The changes in consideration of pulmonary infections since the advent of penicillin and the antibiotics are discussed.

Dr. Sante is Professor and Director of the Department of Radiology, St. Louis University School of Medicine.

This paper was presented at the 12th Annual Assembly of the Missouri Academy of General Practice, St. Louis, November 6, 1960.

I FEEL SURE that, by this time, most physicians have become convinced that we have witnessed a dramatic change in the reaction of human lung tissue to invasion by bacterial infection. Prior to the advent of penicillin and other antibiotic therapy there had been a rather inactive complacency under the mistaken conception that drugs or other therapeutic agents could not be administered internally of sufficient strength to influence the course of bacterial growth and activity in the body because of their other constitutional effects under such circumstances.

The advent of penicillin and other antibiotic therapy for treatment of lung infection has not only had a miraculous curative action on the infection itself, but has also resulted in modification of the process and extent of the invasion in subsequent cases of infection.

1. The bacterial types of infection have run, more or less, true to form, their variations being largely in reduction of the extent of pathologic involvement and in the control of the toxicity of infection. 2. The massive homogeneous consolidation of lobar pneumonia may give place to partial segmental lobular involvement with possibly some irregular exudation; however, in the main, the homogeneousness of the exudate remains relatively the same; the extent of involvement becomes reduced to a fraction of its former volume and its defervescence and absorption is rapidly increased. The bacteria themselves, for the most part, appear to retain their morphologic characteristics, although there has been indication that under certain chemical influences the bacteria themselves may change their physical properties.

Acker and Hartsell call attention to the fact that "the discoverer of penicillin also found a substance that dissolves bacteria."

In 1922 at St. Mary's Hospital in London six years before the epochal discovery of penicillin, Fleming found "a substance present in the tissues and secretions of the body which is capable of rapidly dissolving certain bacteria. This he called 'Lysozyme'; it not only renders service in the natural defenses of the body but has put into the hands of the bacteriologist a wonderful tool in the investigative field which has helped to develop significant new understanding of the bacterial cell wall in its relationship to the process which goes on in the cytoplasm it otherwise protects as well. Occurring in many human tissues and secretions, Lysozyme is presently used to investigate the structure of the bacterial cell."

Disintegration or variations in the bacterial capsule of some bacteria may occur affecting the properties of bacterial form and growth. They have demonstrated formation of rounded coccoid bacteria from bacilli under the influence of Lysozyme.*

Bacteria may have characteristic shapes, spherical (cocci), rod-like (bacilli) and spiral (spirilla). The individual bacterial cell usually maintains this shape with considerable rigidity because of a tough thick-walled membrane or capsule which encases the softer bacterial structure. It has formerly been supposed that bacteria maintain their shape and structure under practically all conditions of their survival. This capsule insulates the bacterial substance from the surrounding structures. It has been estimated that when placed in distilled water that the cell wall must withstand in the neighborhood of 300 atmospheres of pressure due to osmosis.

Indeed, one is impressed with the probability that these variations must be due to change in chemical composition or in chemical reaction to new antibiotic agents. The favorable reaction of a certain drug upon one type of pneumonic involvement may clear the field for the development of other forms which in turn may require other varieties of medication. Already many different antibiotic agents are necessary for effective action on different types of virus infection. One is forced to the conclusion that this is mainly due to chemical action and physical response of the tissue cell structures. Until recent years it has been believed that bacteria were of permanent type and composition and retained their structure, but these findings would indicate that this may not be the case.

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* Acker, R. F., and Hartsell, S. E.: Fleming's Lysozyme, Scientific American, **202**:132 (June) 1960.

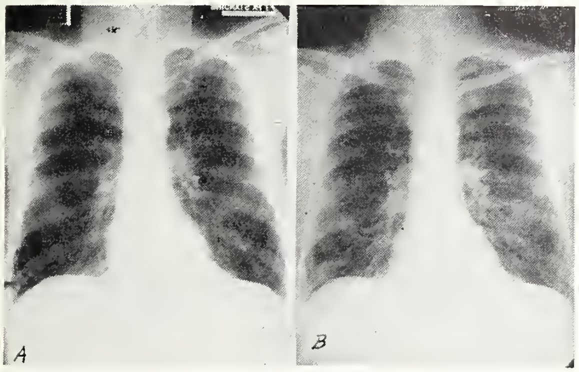

Fig. 1. A. Virus pneumonia attacks primarily the interstitial tissue of the lung causing an increase in hilum shadows and peribronchial markings of the lungs. B. At the onset this may not be immediately recognizable as pathologic, but after a few days the increase in markings becomes quite evident. This, together with clinical symptoms and laboratory findings, should be sufficient for the diagnosis.

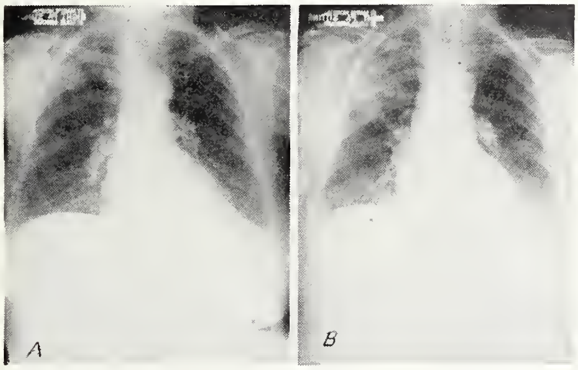

Fig. 2. A. In some individuals the interstitial tissue of the lungs is less firmly confined by the fibrous structure of the peribronchial tissues so that the virus infection spreads at once to surrounding tissue causing exudative reaction. Note beginning exudation in region of second interspace on right side. B. Rapid spread of the exudative process in the right upper lung field within one week has involved practically the entire right upper lobe.

Other types of massive consolidation such as those occurring with staphylococcus and Friedlander bacillus infection, tularemia, toxoplasmosis and tuberculosis also have shown certain changes.

Various bacteria may undergo differing forms of variation, in morphology or degrees of toxicity; the staphylococcus, for instance, ordinarily an innocuous organism in former days, has become one of the most toxic organism causing extensive lung consolidation, rapid cyst-like cavities, empyema, septicemia and death as indicated by the extreme toxicity it has assumed, especially as a postoperative complicating infection. The severity of this infection has caused extreme measures of protection to be taken in operative procedures throughout the country to prevent wound infection and septicemia. It is difficult to understand the development of this susceptibility.

Friedlander bacillus pneumonia may show an increasing tendency to break down with necrosis of tissue and extensive cavity formation. If extensive necrosis has taken place, there may be an increase in size of the bulky mass and definite increase in pressure displacing the mediastinal structures to the opposite side, giving the impression of actual tumor mass, but easily differentiated on consideration of the other clinical findings.

The effect of antibiotic drugs on bacterial pneumonia is usually quite favorable. Securing the drug suitable for its antagonistic properties may require cultural methods but once its curative nature is established, its action is miraculous and recovery from the immediate infection starts almost immediately. Furthermore, by the prompt recognition of the character of the infection and institution of immediate treatment, subsequent cases are held to a minimum and there is amelioration of the contagiousness and virulence of the disease. In the bacterial pneumonias this manifests itself in less extensive involvement of tissue although the type of structures involved are similar and the method of involvement is the same; lobar pneumonia, for instance, still remains an infection of the alveolar spaces, by polymorphonuclear exudate, but the extent of the lobar involvement is much reduced and therefore there is less toxicity. If the antibiotic favorable for sterilization of the infecting organism is administered, regression of its effects is prompt. If, on the other hand, there is delay in laboratory procedure and the effective antibiotic has not or cannot be determined, then the process progresses with greater rapidity with the spread of the infiltration and consolidation with increased toxicity which may lead to death.

In Tularemic pneumonia, for instance, the reaction from the infection varies widely depending upon the method of inoculation and the tissue involved. If initially inoculated into the lymphatics by scratch or wound of the hand while skinning an infected rabbit, the infection spreads by way of the lymphatic channels to all of the lymphatics of the body. The lymphatic collections and their channels become swollen and enlarged, giving a nodular appearance to the lung, ultimately producing irregular consolidation of the lung structures and evidence of pneumonia. There does not seem to be much change in tularemic infection; this is the ulceroglandular type of tularemia.

If the site of primary inoculation is directly into the lungs by droplet infection of the atmosphere while cleaning infected game, the response is entirely different. X-ray examination reveals massive involvement of the lung structure with dense massive consolidation of large volumes of lung parenchyma resembling lobar consolidation in all respects with the exception of confinement to single lobes. There may be some associated pleural effusion or it may predominate. In any event, any lymphatic involvement is at a minimum if it occurs at all.

Another striking example is the manifestation of infection with toxoplasmosis in which it involves different structures. Long known as a disease of the nervous system and brain, especially of the fetus, characterized by multiple areas of calcification in the brain at birth, it may take on a virulent form when inoculated directly into the blood by the bite of an infected tick. It is a systemic disease involving all of the structures of the body; in the lung it involves all structures causing alveolar exudate with hyaline membrane about the respiratory epithelium resulting in death in seven days from extreme toxicity. The rarity of this disease has made it impossible to come to a conclusion as to any change because of the recent trend toward antibiotic treatment.

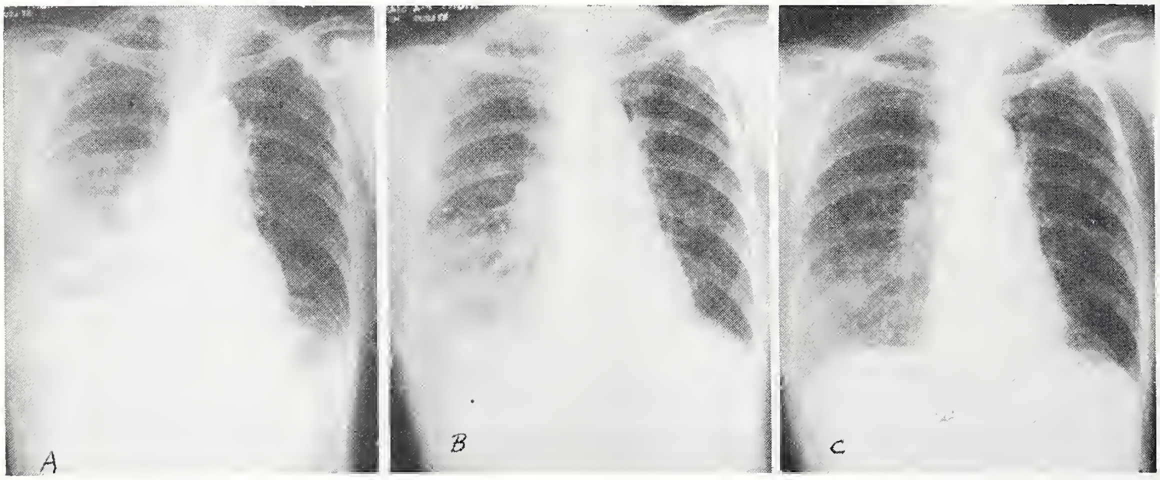

Fig 3. A. Similar dense consolidation involving entire right lower lung field. The consolidation is limited to this region; the remainder of the lung is relatively free from involvement. About 10 days illness. B. Prompt defervescence with absorption of exudate about five days after administration of antibiotic therapy. Note the rounded, nodular appearance of the resolving exudate indicating the segmental character of the infiltration. C. Almost complete regression and absorption of exudate after two weeks treatment.

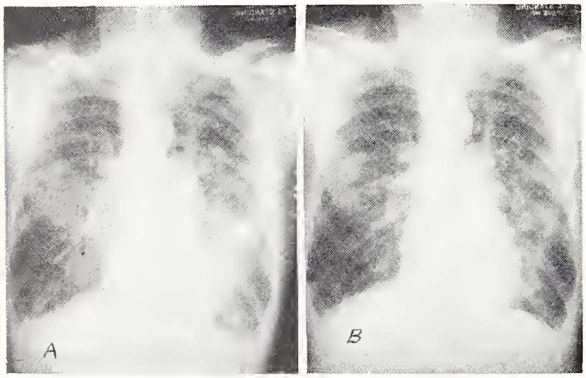

Fig. 4. A. Circular, cyst-like areas of apparent cavity formation sometimes accompany the infiltrative process of virus pneumonia, probably due to simultaneous occlusion of both bronchial and pulmonary circulations in some cases, causing small rounded areas of necrosis. B. Rapid healing of the cystic areas occurs with absorption of exudate after antibiotic therapy.

Pinkerton has demonstrated the organism in two such patients, who died of lung infection and septicemia seven days after first indication of symptoms.

With all of the changes in behavior of infection there does not seem to be much, if any, microscopic evidence of change in the appearance of the organism once infection has taken place.

Still greater variations have developed in tuberculous infections. These, however, appear to be in the lessened degree of toxicity and fatality of the disease rather than to the degree and character of tissue involvement as indicated in the radiologic examination. The roentgen picture may indicate lesions of an extreme degree of involvement and yet healing and recovery may occur with unusual rapidity.

The steady decline in death rate which has been observed for a number of years and which many thought was due to the detection and treatment of tuberculous disease by roentgenographic examination, has been shown to persist without demonstrable variation in its rate of decline indicating that it is probably due to natural causes and not to any special effect of the x-ray examination surveys. While these surveys could not have failed to have some effect, the explanation is probably found in the relatively small number of individuals tested compared to the overwhelming number of the entire population. The amazing changes which have developed in disease characteristics is difficult to understand; the death rate from tuberculosis has continued to decline until large numbers of tuberculosis hospitals have either closed their doors or have been converted into chest hospitals for other types of infection or operative procedures. Scientific pub-

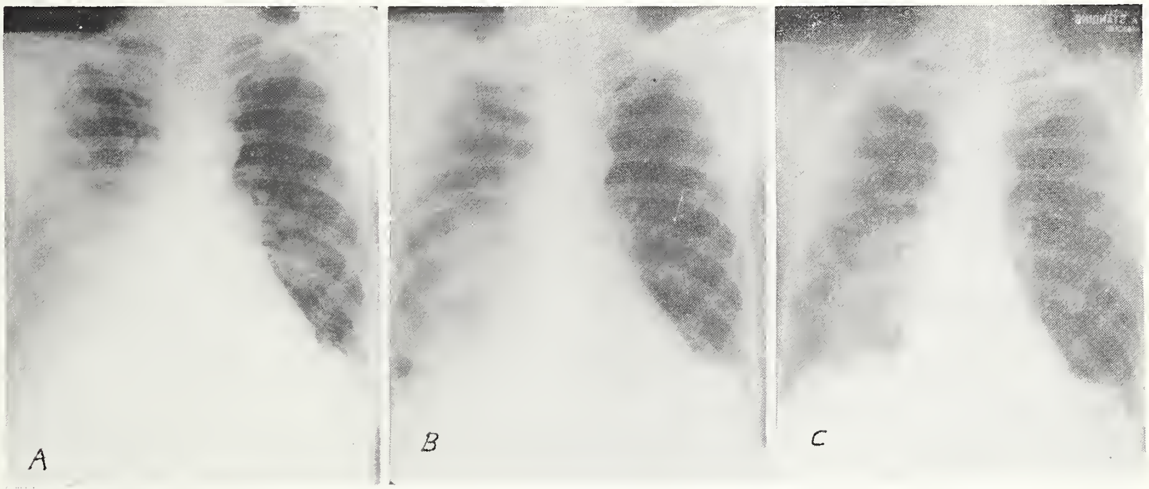

Fig. 5. Extensive right lung involvement with infiltration from virus pneumonia. B. Pronounced absorption of exudate within five days after antibiotic therapy. C. Almost complete absorption after one week.

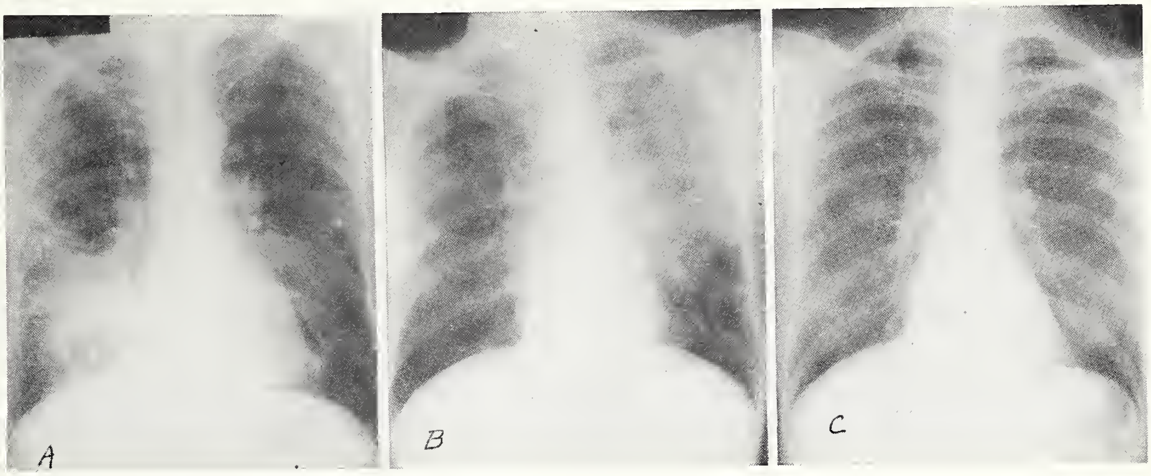

Fig. 6. A. Extensive irregular consolidation of lower portion of the right lung of fully four weeks duration, in spite of all attempts at therapy; fever 105 F. B. Within five days after treatment with suitable antibiotic, complete regression of pneumonic area. Upper three fourths of left lung has developed uniform fine areas of consolidation, however, with pure culture of yeast in sputum. C. Complete healing with disappearance of consolidation after three weeks therapy with K-I, saturated sol. 120 drops 3 times daily.

lications are continually appearing calling attention to the attenuated character of the infection. The tubercle bacillus itself still retains its acid-fast properties and may even cause infiltration and consolidation in the lung and cavity formation but unless injection of the organism into guinea pigs results in their death, reliance can no longer be placed in this for the diagnosis of tuberculosis. Furthermore, such pathologic manifestations may heal with unusual rapidity with surprisingly little remaining scar formation. Various stages representing the degree and extent of tuberculous lung involvement are no longer valid as indication of extent and severity of the disease.

One of the most surprising changes which has taken place is the replacement of the bacterial type of pulmonary involvement with the virus type of infection. The virus type of organism involves the interstitial tissue of the lung, causing infiltration of these structures without the polynuclear type of cell reaction seen in bacterial infection, bacterial pneumonia and tuberculosis.

Virus infection predominantly involves the interstitial tissues of the lungs. This may be so confined to the bronchial wall that the inflammatory evidence of involvement may be actually obscured for the first few days of infection, even after fever and other clinical signs have developed. The roentgen findings may be confined to an increase in peribronchial markings throughout the entire course of the disease, or its effects may spread beyond the peribronchial interstitial spaces to that of the smaller bronchi and alveolae giving the appearance of a fine homogeneous infiltration of the surrounding area. This is the picture usually encountered. Different individuals differ in the degree and character of reaction of different tissues so that in some the degree of resistance of peribronchial structures may be great, confining the effects of infection largely to these regions; in others the extension to finer peribronchial structures is more prominent, even giving the appearance of primary consolidation. Although the distribution of infection is at first segmental, there may be such widespread involvement of a single lobe that it appears to be primarily of lobar involvement.

RICHARD H. KIENE, M.D., ***Kansas City***

A.M.A. Clinical Session

Special Article

Proceedings of the House of Delegates and the session of the A.M.A. held at Washington, D. C., November 28 to December 1, with Missouri Delegates Durward G. Hall, M.D., Springfield; H. E. Petersen, M.D., St. Joseph; Richard H. Kiene, M.D., Kansas City; A. W. Neilson, M.D., St. Louis, are reported.

Missouri Delegates to the A.M.A., Durward G. Hall, M.D., H. E. Petersen, M.D., A. W. Neilson, M.D., and Richard H. Kiene, M.D., attended the meeting in Washington November 28 through December 1, 1960. Alternate Delegate Rolla B. Wray, M.D., and former Alternate Delegate, William J. Shaw, Sr., were in attendance. Among others from Missouri were Alphonse McMahon, M.D., member of the Council on Scientific Assembly of the A.M.A., delegate from the Section on Military Medicine, Donald M. Dowell, M.D., Chairman of the Council of the M.S.M.A., and Byron M. Stuart, M.D., Councilor of the Fifth District; Messrs. T. R. O'Brien and Ray McIntyre, of the M.S.M.A. staff; John R. Buckner, Executive Director of Greene County Medical Society; W. H. Bartleson, Executive Secretary of the Jackson County Medical Society.

A. W. Neilson served as a member of the Reference Committee on Miscellaneous Business. This committee worked far into the night because several controversial items were referred to it.

Durward G. Hall, recently elected to Congress from Missouri's 7th Congressional District, was recognized and asked to address the House of Delegates. Dr. Hall gave a short interesting talk about "Campaigning in the Ozarks" and some of the odd happenings which occurred.

A scholarship and loan program for medical students, the status of foreign medical graduates, an A.M.A. membership dues increase, the expansion of voluntary health insurance, health care for the aged and new developments in polio vaccine were among the major subjects acted upon.

Named as 1960 General Practitioner of the Year was 44-year-old Dr. James T. Cook of Marianna, Florida, who was selected for his dedication to both medical practice and service to the community. Dr. Cook is the 14th recipient of the award.

Speaking at the Monday opening session, Dr. E. Vincent Askey of Los Angeles, A.M.A. President, called upon the delegates to support not only existing A.M.A. programs but also expansion of new programs necessary to meet the challenges of society. Dr. Askey assured the new administration in Washington of cooperation whenever and wherever possible but emphasized that the A.M.A. will not change its policies merely for the sake of conformity.

Scholarship and Loan Program

The House of Delegates approved a scholarship and loan program proposed by the Special Study Committee of the Council on Medical Education and Hospitals, and also urged that there shall be local participation in the program at the state and county level. In commenting on the two-part program, the House approved the following statement by the reference committee:

"This proposed program will provide concrete evidence of the American Medical Association's sincere desire to attract increasing numbers of well qualified young people to enlarge the ranks of our profession. Your reference committee recognizes that the program is wisely designed to allow for its enlargement through the support of individual physicians and other groups. Your reference committee was impressed with the enthusiastic support of this proposal indicated during the course of the discussion. There was indicated a desire that in the final formulation of the administrative details of this program, provision be made for widespread participation by individual physicians as well as county and state medical societies. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with this Association's belief in individual responsibility."

FOREIGN MEDICAL SCHOOL GRADUATES

Meeting the problem of foreign medical graduates, the House of Delegates adopted a report which included the following statement:

"In order that those foreign physicians who have not yet been certified by the Educational Council for Foreign Medical Graduates might be given further opportunity to enhance their medical education, hospitals would be encouraged to develop special educational programs. Such programs must be of educational worth to the foreign graduate and must divorce him from any responsibility for patient care. Foreign physicians may participate in these programs until June 30, 1961, with approval of the Department of State so that their exchange visa will not be withdrawn before that time. This will also allow the non-certified foreign physician the opportunity to take the April, 1961, Educational Council for Foreign Medical Graduates examination." Any special problem will be given individual consideration on its merit.

A.M.A. DUES INCREASE

The House approved a Board of Trustee report which announced that a dues increase would be recommended at the annual meeting in June 1961. The report indicated that the amount would be not less than $10 and not more than $25 to be effective January 1, 1962. The Reference Committee asked the Board to consider an increase in the annual dues of $20, to be implemented over a period of two years: $10 on January 1, 1962, and $10 additional on January 1, 1963.

The House suggested that these funds be used to inaugurate or expand a number of programs including:

1. Financial assistance to medical students.
2. Continuing education for practicing physicians.
3. Health advice to the lay public.
4. Medical research.
5. The expansion by the Communications Division of its program of faithfully portraying the image of the American Medical Association.

It is important, the House emphasized, that the Board of Trustees report recommending the need for a dues increase be transmitted fully to the grass roots level.

VOLUNTARY HEALTH INSURANCE

In place of a Board of Trustees report and three resolutions, the House adopted the following substitute resolutions:

"WHEREAS, It has been widely recognized that voluntary health insurance is the primary alternative to a compulsory governmental program; and

"WHEREAS, The public has shown its confidence in this voluntary system; and

"WHEREAS, Current social, political and economic developments compel a new and revitalized effort to make voluntary health insurance successful; and

"WHEREAS, The American Medical Association has consistently pledged itself to make available the highest type of medical care; therefore be it

"*Resolved*, That the House of Delegates direct the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the American Medical Association with those of the National Association of Blue Shield Plans, the American Hospital Association and the Blue Cross Association into maximum development of the voluntary, non-profit prepayment concept to provide health care for the American people; and be it further

"*Resolved*, That similar leadership be undertaken to coordinate the efforts of private insurance carriers through conferences with their national organizations; and be it further

"*Resolved*, That, where feasible, efforts be made to cooperate with representatives of other types of medical care plans, other professional groups, and representatives of industry, labor and the public at large."

HEALTH CARE FOR THE AGED

The House reaffirmed the Association's support of the Kerr-Mills Bill, which was passed last summer, and its opposition to any legislation involving the use of the OASDI mechanism for medical aid to the aged. The delegates also urged all state and local medical societies to cooperate with the appropriate state officials and provide leadership in implementing the provisions of the Kerr-Mills Bill.

In connection with health care for the aged, the House suggested further experimentation in home care programs, homemaker services and visiting nurse services. The delegates also recommended an increased emphasis at all levels of medical education on the new challenges being presented to physicians in the health care of older persons.

POLIO VACCINE

The House agreed with a Board of Trustees report which said:

"In view of the fact that oral polio vaccine will not be generally available in sufficient quantity in 1961 for any large scale immunizing effort, the Board of Trustees of the A.M.A. strongly recommends that the medical profession encourage the widest possible use of the Salk vaccine for the prevention of poliomyelitis. The Salk vaccine has been proved to be effective and since there are still many segments of the population not immunized against poliomyelitis every effort should be made to encourage the general public to take advantage of the Salk vaccine without delay."

The Board report was amended to suggest that a proper committee be established by the A.M.A. to study the problems involved in administration of the new oral polio vaccine and to establish guides for physicians to follow when they are approached by various groups and asked for their support in administering oral polio vaccine.

MISCELLANEOUS ACTIONS

In considering a wide variety of resolutions and annual and supplementary reports, the House also:

Approved continuing study and periodic re-evaluation of the trend toward locating physician's offices in or adjacent to hospitals;

Directed the Committee on Medical Care for Industrial Workers to carry out its duties as previously instructed and to prepare guides for physician relationships with medical care plans in conformity with the clear policies already laid down by the House of Delegates;

Approved a set of guides relating to drug expenditures for welfare recipients;

Asked the Board of Trustees to study the question of blood replacement responsibility and also the matter of establishing health insurance fee schedules for surgical assistants;

Urged the Board to make every effort to reduce the number of physicians who are non-dues-paying members and approved a three-year study report on the relationships of physicians not-in-private-practice to organized medicine;

Requested the Board to present a completed retirement and disability insurance program for A.M.A. members at the June, 1961, meeting, and

Agreed that the General Practitioner of the Year Award should be continued as at present.

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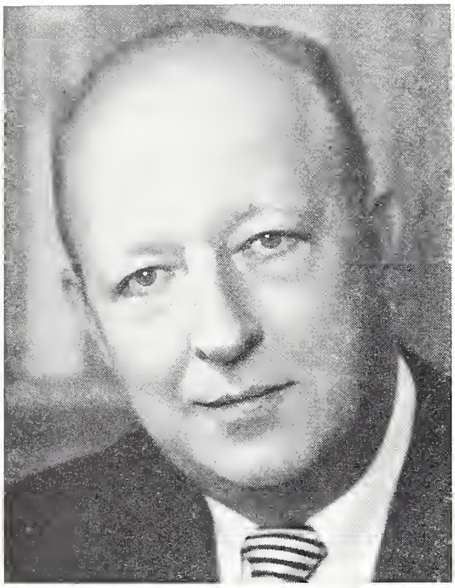

R. O. Muether, M.D.

President's Message

New laws are now in the making—both federal and state. The Missouri General Assembly convened on January 4 and committees in both the Senate and the House of Representatives were appointed.

The Congress of the United States convened early in January and the inauguration of the new President took place in January.

Legislation at both levels is in process and it is a time for the medical profession, and each doctor individually, to be alert on legislative matters. It is probable that the same type of legislation that Congress has refused to pass in 1949, 1950, 1951, 1952, 1953 and again in 1960 will again be introduced.

To assist in contracting legislators, information appears in this issue on legislative representatives and it is suggested that members file this information and make use of it in letting their representatives in Congress and the Missouri General Assembly know their views.

R. O. Muether M.D.

EDITORIALS

ANNUAL SESSION TO HAVE INNOVATIONS

Several departures from usual custom will be included in the 1961 Annual Session of the Missouri State Medical Association, to be held at Hotel Muehlebach, Kansas City, March 19, 20, 21 and 22.

On Sunday evening, following the first session of the House of Delegates and reference committee meetings, there will be a buffet dinner honoring presidents and secretaries of county medical societies and new members of the Association. The dinner will be open to all members and their friends on a subscription basis.

A 50 Year Club will be organized at a luncheon meeting Monday noon. Membership in the club will be open to any member who has practiced 50 years or more, including those who will complete their 50 years in 1961. The luncheon was planned in response to suggestions that such a club be formed in Missouri, as has been done in several states. A questionnaire to all members who would be eligible received favorable and in many cases enthusiastic replies from all but a few members. Many members expressed approval although they will not be able to attend the meeting.

The Committee on Maternal Welfare will have its usual luncheon meeting also on Monday noon. The University of Missouri Medical Alumni will hold their luncheon meeting Tuesday noon and several specialty dinners will be held Monday evening.

In compliance with requests that the meeting be shortened, the last session of the House of Delegates will be held as a breakfast meeting on Wednesday morning. The breakfast will be complimentary to Delegates but will be open by reservation to any member of the Association.

For those who prefer going directly to the convention floor, coffee and rolls will be served in the exhibit area on Monday and Tuesday mornings from 8:00 to 9:00 o'clock.

The Annual Banquet in Honor of Past Presidents will be held as customarily on Tuesday evening. Congressman Thomas B. Curtis, Representative from the Second Missouri District, will be the speaker at the banquet. Past Presidents will be recognized and 50 Year pins will be presented to members who have completed fifty years of practice this year. Dr. R. O. Muether, St. Louis, will preside and will present the gavel to Dr. J. H. Summers, Lebanon.

The program for the session has been based on replies to questionnaires that were sent to members following the last annual session, the principal requests being for a more varied program and of a practical nature. The Committee on Scientific and Postgraduate Work feel that they have arranged such a program and that it will be of value to all members.

UNETHICAL LABORATORIES DISCLOSED

The State of Missouri has been fortunate in having physician-directed ethical laboratories to which practicing physicians could send their patients for laboratory procedures.

The problem of lay laboratories and the unethical practice of laboratory medicine was brought to public attention by a recent inspection of these laboratories in New York City. This was reported in the October 24, 1960, issue of *Time*. As reported in *Time* most of these were "filthy and dishonest and used inadequate equipment and improper procedures." One laboratory which was closed had a branch laboratory in Chicago, which also was ordered closed.

One of the reasons for the existence of such laboratories was their arrangement with many unsuspecting, and perhaps some unscrupulous, physicians, whereby they provided "all the laboratory test you wish to order for $75.00 a month." All ethical laboratories in Missouri provide free laboratory service for indigent patients.

It is obvious that the only worry that a physician has who sends his patients to a cut-rate laboratory is that he may get what he pays for. This type of practice should not be permitted to get a start in this state.

"There is hardly anything in the world that someone cannot make a little worse and sell a little cheaper—and the people who consider price alone are this man's lawful prey."—John Ruskin.

T. J. Cooper, M.D.

Ramblings of the Field Secretary

The interim session of the American Medical Association held in Washington, D. C., November 28-December 1, 1960, is now history but a number of matters considered and positions taken may have both current and future implications. Take for instance the establishment of a scholarship and loan program for medical students, which seems to be universally needed both present and in the foreseeable future.

The House of Delegates of the American Medical Association at this session unanimously was behind this suggested program of medical student scholarships and loans which was presented to the House in the report of the Council on Medical Education and Hospitals. The Missouri Delegates, namely: Drs. Durward Hall, Springfield; H. E. Petersen, St. Joseph; Richard Kiene, Kansas City; and A. W. Neilson, St. Louis, not only took part in all sessions of the A.M.A. House of Delegates on Monday, November 28, and Wednesday, November 30, but spent all day Tuesday, November 29, in reference committees where various important matters were being discussed.

Missouri delegates in action.

Dr. Neilson served as a member of the reference committee on Miscellaneous Business. Serving on this committee he not only heard arguments for and against matters under consideration by this committee during the entire day of Tuesday, November 29, but spent a good part of that night in helping to write the report of the reference committee which was then presented to the House of Delegates on Wednesday, November 30. Breakfast sessions of the Missouri Delegates were held so that various issues before the House of Delegates could be discussed from a Missouri standpoint and the thinking of each one of our four delegates could then be known to the other relative to the matters under consideration.

Dr. Rolla Wray, Nevada, an Alternate Delegate, also sat in on reference committee meetings, the Missouri breakfast sessions and the regular sessions of the A.M.A. House.

Missouri delegates held morning caucuses.

What was called a "Missouri Room" was maintained during the session so that the Missouri Delegates and other Missouri physicians who were attending the A.M.A. meeting could meet, visit and discuss the business at hand. Two members of the Council of the Missouri State Medical Association, namely; Dr. Donald Dowell, Chillicothe, Chairman of the Council, and Dr. Byron Stuart, Boonville, Councilor of the Fifth District,

Missouri doctors visited in the Missouri headquarters room.

(Continued on page 138)

BRONCHI AT EASE—DAY AND NIGHT

New Isuprel Compound Elixir, with a pleasant vanilla flavor, keeps the bronchi dilated in patients with asthma and chronic bronchitis. Isuprel Compound Elixir permits easy breathing, prevents bronchospasm, promotes expectoration and reduces wheezing or disturbing allergic or bronchitic cough.

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Children—from 1 to 3 teaspoons (5 to 15 cc.) three times daily as required. Adults — 1 or 2 tablespoons (15 to 30 cc.) three or four times daily as required.

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News—Personal and Professional

To serve until the expiration date of the term of office, **George E. Kister,** M.D., St. Charles, has been appointed city physician to fill the unexpired term of the late Joseph M. Jenkins, M.D.

Recently elected as president of the medical staff of St. Vincent's Hospital, Pagedale, is **William B. Lytton,** M.D., Ladue. **Murray E. Finn,** M.D., St. Louis, was elected vice president, and **S. R. Banet,** M.D., St. Louis, was elected secretary.

The medical staff of St. Mary's Hospital, Jefferson City, recently elected **Harold Kanagawa,** M.D., as president of the staff. He succeeds **John I. Matthews,** M.D., who was elected vice president. **Larry B. Klebba,** M.D., was elected secretary-treasurer, and Drs. **J. A. Ossman** and **Harold C. Stricker** were elected members of the executive committee.

Appointment of **James W. Colbert, Jr.,** M.D., St. Louis, to a committee on financing medical education has been announced by the Association of American Medical Colleges.

"The Physician as a Citizen of the Community" was the subject of a talk presented by **John F. Bowser,** M.D., Kansas City, before the South Central Business Association in Kansas City on December 13.

Guest speaker at a winter meeting of the Jasper County Medical Secretaries and Assistants Society at Joplin was **S. W. Scorse,** M.D., Joplin.

Need for a county health center in Randolph County was discussed by **W. D. Chute,** M.D., Moberly, at a meeting of the Moberly Rotary Club.

The Central Missouri Chapter of the American College of Surgeons has elected **J. A. Ossman,** M.D., Jefferson City, as president. **James C. Cope,** M.D., Columbia, was elected vice president.

Principal speaker at an 11-county district health conference held in Joplin in December was **Addison M. Duval,** M.D., Jefferson City.

The Central Missouri Association of Life and Health Insurance Underwriters had as their speaker at a meeting in Sedalia **Vernon E. Wilson,** M.D., Columbia, who spoke on "Professions and Professionalism."

The St. Louis Academy of General Practice installed **Vernon E. Michael,** M.D., St. Louis, as president at an installation dinner-dance early in December. Other officers installed were **Wilbur A. Mullarky,** M.D., president-elect; **Eugene H. Edele,** M.D., vice president; **Lois C. Wyatt,** M.D., secretary, and **Richard F. Jotte,** M.D., treasurer. New members of the board are Drs. **Robert B. Bassett, John V. King** and **Joseph F. Trigg.**

The Silver Beaver award of Boy Scouts was awarded **G. W. Winn,** M.D., Boonville, at a meeting of the Great River Council of the Boy Scouts of America held in Columbia. The award is for distinguished and exceptional service to boyhood through scouting and other activities.

RAMBLINGS—Continued

attended various sessions of the House of Delegates and visited in the "Missouri Room." The accompanying picture depicts an amiable group of Missouri doctors visiting in the "Missouri Room." Reading left to right, Dr. Stuart, Dr. Victor Buhler, Kansas City; Dr. W. J. Shaw, Sr., Fayette; Dr. Dowell and Dr. Neilson.

Much credit should deservedly go to the Delegates from the various state medical associations who go to these A.M.A. sessions where so many important matters vital to the health of the nation as well as to the practice of medicine are so thoroughly considered. It is certainly a working occasion which in the final analysis reverts to the benefit of all physicians and their patients.

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MISSOURI STATE MEDICAL ASSOCIATION

103rd Annual Session

Hotel Muehlebach, Kansas City

March 19, 20, 21, 22, 1961

Sunday, March 19, 1961

1:30 p.m. House of Delegates, Colonial Room.

3:30 p.m. Reference Committee meetings, Rooms A, 4, 362, 363, 364.

7:00 p.m. Buffet Dinner Honoring County Medical Society Presidents and Secretaries and New Members, Colonial Room.

PROGRAM

Monday, March 20, 1961

8:00 a.m. Registration, Grand Ball Room.

8:00 to 9:00 a.m. Coffee and Rolls, Foyer, Grand Ball Room.

9:00 a.m. Refresher Courses:

Office Ophthalmology, John A. Buesseler, M.D., Columbia, Room 362.

This presentation will consist of an illustrated categorization of the various important ophthalmologic disorders encountered in general practice, their various causations and manifestations. Diagnostic criteria and modes of treatment will be particularly stressed.

Office Urology, James C. Cope, M.D., Columbia, Room 363.

The presentation will open with a discussion of what is office urology and the extent of diagnostic and therapeutic measures that may be done as office procedures and what diagnostic instruments should be in every physician's armamentarium. This will be followed by a discussion of diagnostic points on all urologic diseases. Office treatment of the minor urologic difficulties will be discussed.

Electrocardiography, John A. Nuetzel, M.D., Clayton, Colonial Room.

This refresher course will be limited to the discussion of present concepts of the normal electrocardiogram. This will include appraisal of normal rate, rhythm, intervals and various parts of the electrocardiographic cardiac cycle. Normal variants subject to misinterpretation will be shown.

Emergencies in the Newborn Infant, M. Remsen Behrer, M.D., St. Louis, Room 364.

Most pathologic processes in the newborn infant require rapid and careful handling in order to save the infant's life. Accurate, early diagnosis is necessary to institute proper therapy before deleterious effects occur. Unfortunately, there is no adequate treatment in many situations because of lack of understanding of the disease process involved, but this only makes it more imperative to handle the others properly.

The most common medical emergency in the newborn infant is the resuscitation of an unresponsive baby. The newest recommended procedures will be discussed and demonstrated. Other topics to be discussed will be tracheoesophageal fistulae, obstruction of the gastrointestinal tract, convulsions and acute infections. Diagnostic methods and therapy will be outlined.

10:00 a.m. Intermission to View Exhibits.

10:30 a.m. Panel: What's New? Colonial Room.
Moderator: Kenneth K. Keown, M.D., Columbia.
Panelists:

Tranquilizers and Analgesics, Jackson A. Smith, M.D., Chicago.

The types of patients for whom these drugs are recommended, the period of time they should be continued before either the patient or the physician becomes discouraged and the superiority of one compound as compared to another—are areas not yet dulled by general agreement. These problems are considered. In addition, this present age of "Lost Tranquility" is briefly noted.

Radiologic Diagnosis, Armand E. Brodeur, M.D., St. Louis.

Burns, William Stoneman, M.D., St. Louis.

Recent clinical and experimental work will be outlined in the two general areas of the burn problem: care of the burn wound and general supportive measures.

Research involving the practical aspects of the clinical problem as well as investigative work likely to affect the fundamental principles of burn management will be critically discussed.

Procedures and routines which the discussant has found particularly useful in children and the elderly will be described and brief résumé of changing trends in burn care at centers where larger volumes of burned patients are handled will be given.

Allergies, Giles A. Koelsche, M.D., Rochester, Minn.

12:00 noon Maternal Welfare Luncheon, Trianon Room.
James E. Keeler, M.D., Kansas City, Presiding.
Report of the Committee on Maternal Welfare, Robert S. Brown, M.D., Kansas City.
Bacterial Shock, Seymour Monat, M.D., St. Louis.

12:00 noon 50 Year Club Organization Luncheon, Room 364.

2:00 p.m. Panel: Leukemia, Room T 22.
Moderator: Edward H. Reinhard, M.D., St. Louis.
Panelists:
Basic Considerations Concerning the Etiology and Pathogenesis of Leukemia, William J. Harrington, M.D., St. Louis.
Unusual Clinical Manifestations and Complications of Leukemia, Edward H. Reinhard, M.D., St. Louis.
Treatment of the Chronic Leukemias, Gustave Eisemann, M.D., Kansas City.
Treatment of the Acute Leukemias, James P. King, M.D., St. Louis.
Questions and Answers.

Sponsored by Missouri Division, American Cancer Society.

Robert B. Bassett, M.D., St. Louis, Presiding, Colonial Room.

2:00 p.m. Treatment of Diseases of the Thyroid, George Crile, M.D., Cleveland.

Physicians and surgeons have been slow in applying to their practice much of the basic knowledge of thyroid physiology that has been developed in the last twenty years. In certain areas, struma lymphomatosa, for example, is still being treated surgically when it is well known that feeding of desiccated thyroid causes enlargement of the thyroid to shrink or disappear.

Frequently small multinodular goiters are treated by thyroidectomy instead of by thyroid feeding, even when there is nothing about the goiter to raise the suspicion of malignancy. Frequently following operations for nodular goiter, patients are not given thyroid to prevent recurrences, and frequently after operations for well differentiated and endocrine-dependent thyroid cancers thyroid therapy is not given despite the fact that its value in preventing growth of any tumor that might be present or in the control of the growth of metastases is well established.

Too much emphasis has been placed on destruction of residual thyroid cancer by radioactive iodine or external irradiation and not enough on suppression of its growth by thyroid feeding. There is evidence to suggest that radiation may in certain cases induce change of thyroid cancers to more malignant forms and that for this reason the primary treatment of inoperable thyroid cancers of the differentiated type should be by thyroid feeding rather than by radiation therapy.

Sponsored by the Missouri Surgical Society.

2:30 p.m. A Natural History of Juvenile and Adult Diabetes, Robert C. Hardin, M.D., Iowa City, Iowa.

Patients with diabetes are of all ages but most of them are elderly and have had the disease for a relatively short time. There are important clinical differences between these patients and the less numerous group whose onset of diabetes occurs early in life.

The juvenile diabetic patient has no serious clinical complications in the first 10 years. Later he typically develops capillary degeneration with retinopathy as the chief manifestation. Serious degrees of capillary degeneration lead to blindness and to renal failure.

The older diabetic patients have arteriosclerosis as the most common complication. This most often affects the heart and the legs and is greater both in incidence and severity than among persons of equal age without diabetes. Infections, particularly of the respiratory system and the urinary tract, are also common in older diabetic persons.

The diagnosis of diabetes is usually easy in the young because the disease is always severe. The older patient is more likely to have mild diabetes with few symptoms. Sometimes, from the clinical standpoint, complications seem to appear before the underlying disease in the older patients.

The treatment of the young must be concerned with diabetes itself. The juvenile onset type of diabetes is often difficult to control but there is a serious penalty for failure. The older patient is easily controlled but his complications often require maximum effort.

Sponsored by the Missouri State Diabetes Association.

3:00 p.m. The Changing Epidemiology of Tuberculosis, John S. Chapman, M.D., Dallas, Texas.

As the incidence of new cases of tuberculosis has declined, the incidence of the positive skin test among children has also declined. Because of this it is now possible to determine with a much greater degree of accuracy the way in which tuberculosis is spread from the open case to the healthy population.

Figures seem to indicate that the greatest spread takes place within the families of tuberculous adults, but that the spread is not uniform among children. In general, younger children are more affected than older. The degree of infectivity appears to be controlled in part by the amount and positivity of the sputum. Present work also confirms data from other sources indicating that the tuberculous male is a greater transmitter of the disease than the female. The importance of the elderly male as a transmitter of the disease is beginning to emerge, in that in many cases studied the grandfather was the source of infection. The hardest single aspect of contagion to measure is the duration of open disease in the adult. In many cases the degree of transmission of infection in the family seems to be related to this least measurable element. At the same time, it appears certain that young infants may be infected within as short a span as six weeks after birth.

The clarification of the transmission of human tuberculosis and the development of skin antigens for infections caused by other acid-fast mycobacteria permits the beginning study of the epidemiology of the diseases caused by anonymous mycobacteria. The epidemiologic data in regard to these diseases is yet too small to permit any clear conclusions.

Sponsored by the Missouri Chapter, American College of Chest Physicians.

3:30 p.m. Intermission to View Exhibits.

4:00 p.m. House of Delegates, Colonial Room.

4:30 p.m. Reference Committee meetings, Rooms A, 4, 362, 363, 364.

6:30 p.m. Dinner Meeting of the Committee on Diabetes and the Missouri State Diabetes Association, Room T22.
Henry E. Oppenheimer, M.D., St. Louis, Presiding.
Convulsive Disorders Complicating Juvenile Diabetes,
Robert C. Hardin, M.D., Iowa City, Iowa.

Tuesday, March 21, 1961

8:00 a.m. Registration, Grand Ball Room.

8:00 to 9:00 a.m. Coffee and Rolls, Foyer, Grand Ball Room.

9:00 a.m. Panel: Hypnosis: Indications and Complications.
Moderator: Henry V. Guhleman, Jr., M.D., Jefferson City.
Panelists:

Obstetrics, Melvin M. Schwartz, M.D., St. Louis.

Why use hypnosis instead of chemical anesthesia? There is a definite safety factor in both mother and child in avoiding general anesthesia.

Why then not use natural childbirth? Natural childbirth is fine and, in my opinion, is a type of self-hypnosis.

How is a patient prepared for hypnosis childbirth? I, personally, give a three month course of instruction in groups of three to seven women, one hour weekly.

Are patients forced to use hypnosis? Of course not.

What happens if the subject should come out of trance? There is, of course, an attempt made to help them back into trance state. If this cannot be done, one can always fall back to sedation.

Are there disadvantages in the use of hypnosis? The only disadvantage that I can think of is the amount of time spent with these patients.

Are there dangers in the use of hypnosis in childbirth? I can think of none as long as one sticks to hypno-anesthesia in childbirth.

What technics are used in obstetrical hypnosis? Direct hypno-anesthesia, time distortion, dissociation, diversion and simple relaxation or any combination of these. In discussing these I will also discuss the use of semantics and its importance in hypno-anesthesia.

Psychiatry, Louis J. West, M.D., Oklahoma City.

Recent advances in dynamic psychiatry and in neurophysiology permit a more comprehensive definition of the hypnotic state to be made than has been possible in the past. This definition emphasizes the ways in which the "subject" utilizes normal mental mechanisms in the special service of the hypnotic relationship or rapport with the "operator." Indications and contraindications as well as complications of the use of hypnosis are seen first as they relate to the exercise of these particular mechanisms. Secondly, the use of hypnosis must be understood in terms of the operator's intentions and the actual suggestions (both verbal and nonverbal) that are made in the course of the hypnotic relationship. In some ways, both the advantages and dangers of hypnosis have been exaggerated. However, there are quite real uses and abuses of hypnosis in medical practice. A number of these will be outlined together with a commentary about the relationship of hypnosis to drugs that influences the state of consciousness.

Anesthesia, O. B. Crawford, M.D., Springfield.

In discussing the use of hypnosis in anesthesia in a relatively brief period, it is necessary that emphasis be given certain phases of the subject rather than presenting an outline or résumé. Extensive study, experience with and without personal supervision, and appreciation of its indications and advantages are prerequisites to success with hypnosis in anesthesia. The extent of its clinical application is directly related to the interest and ability of the hypnotist. Therefore, the indications for its use are relative.

The following phases will be elaborated upon: (1) levels or depth of hypnosis, (2) preoperative preparation for anesthesia, (3) hypnosis for premedication, (4) hypno-inductions, (5) hypnosis as supplement to regional and general anesthesia, (6) hypnosis as the primary anesthetic, (7) posthypnotic suggestion for the postoperative period (pain relief, mental attitude), (8) other phases (pain relief for patients with inoperable malignancy, painless hypodermics) and (9) possible complications.

10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Hip Joint Problems From Birth to Old Age, J. Vernon Luck, M.D.,
Los Angeles, Calif.

From many viewpoints the hip joint is the site of more complex clinical problems and has stirred up more interest and controversy than any other joint in the body. As a subject of clinical investigation, it long ago passed up the much maligned sacroiliac joint. Beginning with the problems of the newborn infant, it is safe to say that no other joint more frequently arrives defective, and no other major joint can cause more disturbance in the sunset of life. Between childhood and old age, the performance of the hip is generally fairly good. The patients' concept of the hip and the concept as physicians are often quite different. To the patient, anything from the lumbar region to the sacroiliac area to the lateral trochanteric bursa represents hip trouble.

In this presentation, the various hip joint entities in the different age groups will be discussed. The problems of infancy will, as expected, include dysplasia and dislocations of the hip, congenital coxa vara, pyarthrosis of the hip joint and unrecognized trauma. Legg Perthes disease, slipped epapital femoral epiphysis and rheumatoid arthritis in childhood will be reviewed. The complex problem of fractures of the hip in childhood will be discussed. Middle age problems of rheumatoid arthritis and avascular necrosis of the head of the femur will be included. In old age, fractures of the neck of the femur with its influence on the hip joint, arthrofibrosis and a discussion of traumatic arthritis in general will be included. Lastly, and perhaps most important, will be osteoarthritis of the hip.

It has been my privilege to investigate both clinically and from the standpoint of pathogenesis several of the entities that relate to the hip joint. A new concept of the pathogenesis of osteoarthritis will be illustrated by both clinical and pathologic studies. Emphasis will be placed on the importance of early diagnosis, pointing out methods of early recognition of the various entities.

11:45 a.m. Questions and Answers.
Moderator: M. Pinson Neal, M.D., Columbia.

12:00 noon University of Missouri Medical Alumni Luncheon, Trianon Room.

2:00 p.m. Mitral Incompetence, Howard B. Burchell, M.D., Rochester, Minn.

Mitral incompetence has been a particular interest of cardiologists since the time of Laennec and Hope. The technic of cardiac catherization and the intracardiac explorations by the surgeon have given new and more definite knowledge about the function of the diseased mitral valve and correlations established with clinical findings. It is now possible to clinically predict the type of mitral insufficiency with reasonable certainty. For instance, any associated mitral stenosis, rigidity of the valve and ruptured chordae tendinae may be predicted. The location of the maximum intensity of pansystolic murmur correlates with the direction of regurgitant jet into the left atrium. The results of surgical repair to the mitral valve are worthwhile particularly when the valve is of a mobile type or is incompetent as a result of a perforation of its leaflet consequent to previous subacute bacterial endocarditis. Mitral prostheses have given promising results in the laboratory and their utilization in patients have shown excellent function over limited periods.

2:30 p.m. Intermission to View Exhibits.

3:00 p.m. Panel: Out-Patient Trauma, Colonial Room.
Moderator: Robert E. Funsch, M.D., St. Louis.
Panelists:

Injuries Peculiar to Children, J. Vernon Luck, M.D., Los Angeles, Calif.

Points to be discussed will include: the differences between children's fractures and adults; the need for taking x-rays bilaterally when extremities of smaller children are involved. The deformities of children's fractures will be reviewed, including a discussion of the deformities which require correction, and those which will correct with growth. Alignment is generally the chief need in children, rather than apposition. Epiphyseal fractures and separations frequently can be taken care of in the out-patient department, but much consideration must be given to the location of the epiphyseal injury and the extent of the deformity. Elbow injuries that can safely be cared for in the out-patient department will be separated from those in which it would be hazardous to undertake out-patient care. The complications and pitfalls of out-patient injuries will be summarized.

Injuries of the Head and Neck: Treatment and Precautionary Measures, Howard J. McAlhany, M.D., Springfield.

The principle phases of this presentation will be (1) to emphasize a patent airway and proper positioning of patient as most important immediate objective in an unconscious patient; (2) to stress the importance of "vital signs" and fluid administration and discuss briefly the use of intravenous urea and hypothermia; (3) to conclude that heroic surgical treatment is not the solution for the problems of head injury. The immediate care of cervical injuries will be reviewed and the indications and contraindications for surgical intervention following trauma of the spine will be discussed.

Injuries of the Knee and Ankle, Paul W. Meyer, M.D., Kansas City.

Injuries of the Wrist and Hand, Otis E. James, Jr., M.D., Kansas City.

Discussion and evaluation will be presented of (1) lacerations of the hand, (2) fractures of the phalanges and injuries to the nails, and (3) common fractures of the wrist and their treatment.

Thermal Injuries, Including Ambulatory Burns and Frostbite, C. Alan McAfee, M.D., St. Louis.

Injuries to the Shoulder and Elbow, Robert E. Funsch, M.D., St. Louis.

Sponsored by the Committee on Trauma, Missouri State Medical Association.

3:00 p.m. Panel: Management of Difficult Heart Problems, Room T 22.
Moderator: Hugh E. Stephenson, Jr., M.D., Columbia.
Panelists:
Theodore E. Keats, M.D., Columbia.
Jack M. Martt, M.D., Columbia.
Henry G. Stoeckle, M.D., Columbia.

Among subjects to be covered are included: problem of the cyanotic infant, the acyanotic baby in heart failure, the problem of the functional murmur, complications of a coronary infarct, intractable angina, myocardial aneurysms, new advances in the management of heart block, premature paroxysmal auricular tachycardia and problems involving premature contractions, cardiac emergencies, evaluation of the rheumatic patient for cardiac surgery and a discussion of the risk of surgery in the patient with cardiac disease.

Sponsored by the Missouri Heart Association.

4:30 p.m. Adjournment.

Wednesday, March 22, 1961

7:30 a.m. House of Delegates Breakfast, Trianon Room.

9:30 a.m. Panel: Exfoliative Cytology in Your Practice, Room T 22.
Moderator: L. R. Moriarty, M.D., Kansas City.
Panelists:
Hector W. Benoit, Jr., M.D., Kansas City.
George O. Miles, M.D., Kansas City.
Robert L. Newman, M.D., Kansas City, Kans.

Sponsored by the Missouri Society of Pathologists.

9:30 a.m. Panel: The Doctor Is Sued, Colonial Room.
Moderator: Charles B. Wheeler, Jr., M.D., LL.B., Kansas City.
Panelists:
Frederick D. Lewis, LL.B., Kansas City.
Blake A. Williamson, LL.B., Kansas City.
John M. Kilroy, LL.B., Kansas City.

Personal injury litigation continues to increase and cause contact between the legal and medical professions. Much of the legal strategy involved in such cases is a mystery to the medical witnesses involved. In this panel discussion, two well known legal authorities combine their talents to discuss a case of acute cervical strain from the day of the accident up to and including the trial.

11:00 a.m. Intermission to View Exhibits.

Maxwell G. Berry, M.D., Kansas City, Presiding, Room T 22.

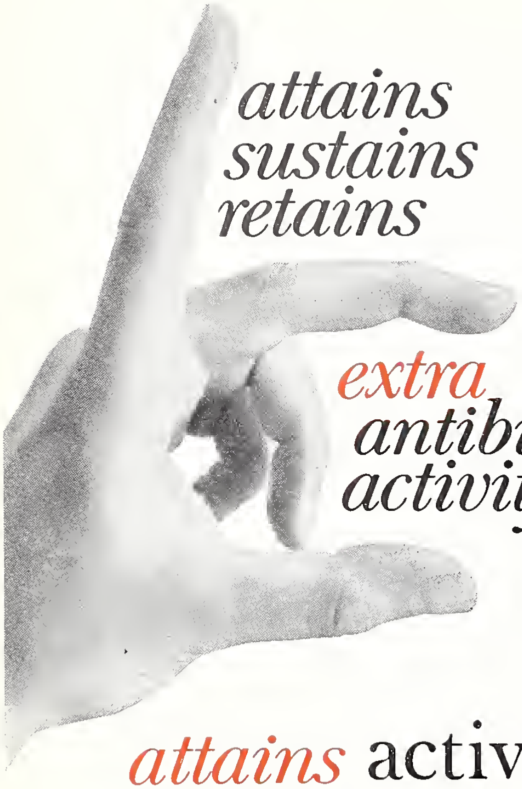
11:30 a.m. A Review of the Nature of Angina Pectoris, E. Grey Dimond, M.D., La Jolla, Calif.

Angina pectoris is a term frequently used in medicine to indicate the subjective story of a patient who suffers from a particular type of discomfort and which particular discomfort is assumed to result from coronary artery disease. In other words, at the present time there is no way to validate the condition of angina pectoris except by the history presented by the patient.

Attempts at therapy, whether medical or surgical, are impossible to evaluate because of this subjective nature of angina pectoris.

A description of objective means of quantitation of the presence of angina pectoris will be presented. The role of the electrocardiogram, the ballistocardiogram and cardiac catheterization will be discussed. Is angina pectoris associated with physiologic changes in circulation? Are these changes measurable?

Sponsored by the Missouri Society of Internal Medicine.



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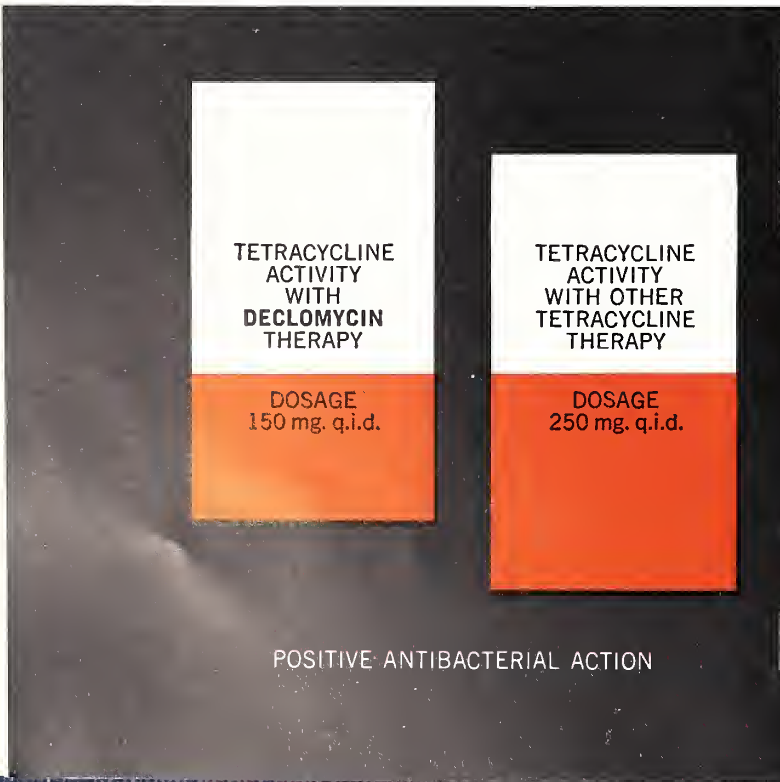

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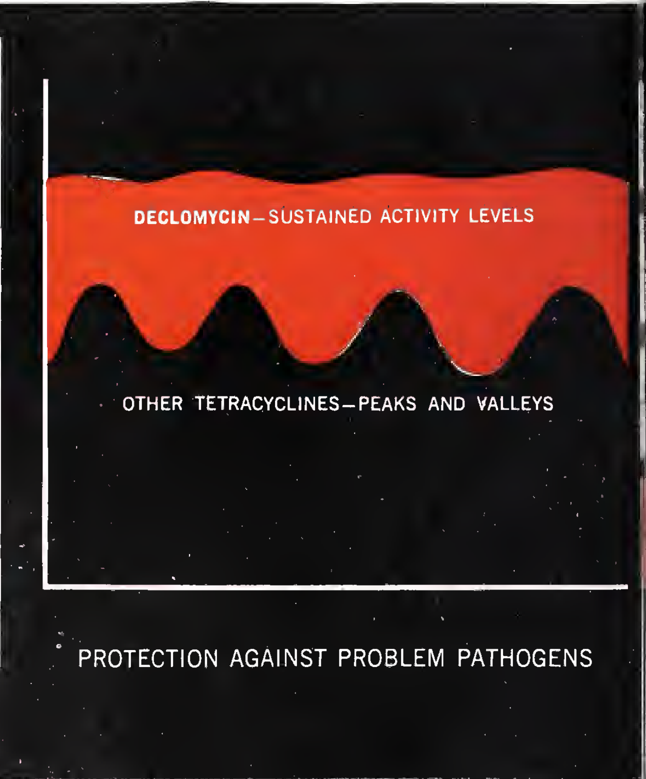

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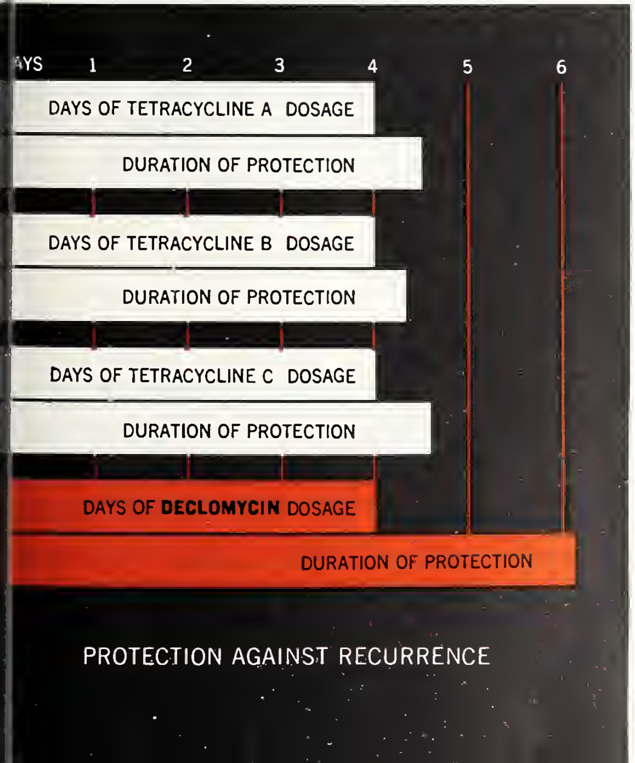

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County Society News

FIRST DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

BUCHANAN COUNTY MEDICAL SOCIETY

At the annual election meeting of the Buchanan County Medical Society the following officers were elected to serve in 1961: President-Elect, Dr. John R. Forgrave; Vice-President, Dr. John R. McDaniel; Secretary for the fifth consecutive term, Dr. William B. Rost; Treasurer for the seventh consecutive term, Dr. Robert W. Kieber; Censor, Dr. Maxwell Day; Delegate, Dr. John N. Martin; Alternate Delegates, Drs. C. C. DuMont and Richard V. Riddell; Member committee on public policy, Dr. John L. Mothershead; Trustee to 1966, Dr. Irwin Rosenthal; Member Executive Secretary Committee, the retiring President, Dr. Thompson E. Potter.

Dr. Judson M. Hughes has been serving as President-Elect in 1960 and will assume office with the newly elected officers for the coming year. The election meeting followed a dinner, December 7, 1960, in the Oak Room of Hotel Robidoux in St. Joseph.

WILLIAM B. ROST, M.D., *Secretary*

GRAND RIVER MEDICAL SOCIETY

The 46 members and wives who attended the annual Christmas Dinner Party of the Grand River Medical Society, at the Strand Hotel in Chillicothe, December 8, were well rewarded with a program which proved to be informative, inspiring and entertaining.

Dr. Muether was honored guest and speaker.

Dr. Dowell presented the President's Plaque to Dr. Smith.

Christmas spirit was evident in decorations.

The Society was honored to have present Dr. R. O. Muether, St. Louis, President of the Missouri State Medical Association. He stated that he had been asked to say a few serious words and that he had a letter to prove it. Dr. Muether commented briefly on several aspects of Missouri medicine. He emphasized that the State Association, which opposes Forand type legislation as does most of organized medicine, is exploring all avenues in its quest of better care for the indigent aged.

Reverend A. L. Winn of the Christian Church in Chillicothe gave a timely account of his inspiring trip to the Holy Land.

Mr. Ray McIntyre, Field Secretary of the State Medical Association, had a kind word to

Dr. Dowell, Rev. Winn, Dr. Muether, Dr. Clark and Dr. Smith.

say for the Woman's Auxiliary which he commended for the party decorations as well as for their activities during the past year.

Dr. Robert Smith, retiring President of the Grand River Medical Society, was presented a President's Plaque by Dr. Donald Dowell, First District Councilor.

The entertainment was concluded as all joined in singing Christmas carols with Mrs. Bohnsack at the piano.

Guests present were Dr. and Mrs. R. O. Muether, Reverend and Mrs. A. L. Winn, Mr. Ray McIntyre and six local representatives of drug companies.

B. D. Howell, M.D., *Secretary*

SECOND DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly, Thursday night, December 8. The scientific program for the evening was presented by Carl Almond, M.D., and Victor Carnes, M.D., of the faculty of the University of Missouri Medical School at Columbia. They presented a case report followed by a clinical pathological discussion of "Non-Pancreatic Tumors With Associated Hypoglycemia."

Members present were Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, T. S. Fleming, R. M. Hasson, L. E. Huber, A. P. Rowlette, C. C. Smith, S. R. Szymanski and R. H. Young, Moberly; C. C. Rice, Brunswick; C. C. Weger, Keytesville; F. L. Barnett, Paris; F. L. Harmes, Salisbury; P. V. Dreyer, Huntsville; J. E. Campbell, D. E. Eggleston, Carl Rinker and Howard Miller, Macon. Guests were Dr. Leopold Chance, Centralia, and Dr. C. W. Meinershagen of the State Division of Health, Jefferson City.

Josephine Baker, M.D., *Secretary*

FOURTH DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air in Wentzville on Tuesday evening, November 22. The evening festivities began with a social hour followed by an excellent steak dinner and then an interesting discussion on "The Need of a Health Center for St. Charles County" by C. W. Meinershagen, M.D., Missouri Division of Health.

Doctors listen attentively to Dr. Meinershagen.

Most of the sixteen doctors present took part in the general discussion of the subject following Dr. Meinershagen's formal presentation.

Ray McIntyre, Field Secretary to the State Medical Association, was a guest.

Paul Rother, M.D., *Secretary*

SIXTH DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry, Johnson, Pettis, Saline County Medical Societies

A joint dinner meeting of the Henry, Johnson, Pettis, Saline and Lafayette-Ray County Medical

Societies and the doctors' wives was held at McKay's Wings in Marshall, Tuesday night, November 29. Some 50 doctors and their wives along with a number of local representatives of various pharmaceutical companies were in attendance. Following an enjoyable social hour an excellent smorgasbord dinner was served. After dinner the ladies were invited to the Esser home in Marshall where Mr. Esser demonstrated and discussed various diamonds and other precious gems.

The scientific program presented to the doctors was given by John F. McDonnell, M.D., Kansas City, internist, who discussed "The Adrenal Cortex in Everyday Practice." His was an interesting and well presented subject.

Two Past Presidents of the Woman's Auxiliary to the Missouri State Medical Association were presented and introduced; namely, Mrs. C. A. McBurney, Slater, and Mrs. W. E. Martin, Odessa. Cecil Leitch, M.D., Blue Springs, President of the Missouri Academy of General Practice, was a special guest at the meeting.

C. A. McBurney, M.D., President of the Saline County Medical Society, presided at the formal part of the evening's program.

R. W. Blalock, M.D., *Secretary*
Saline County Medical Society

West Central Missouri Medical Society

The regular meeting of the West Central Missouri Medical Society was held at the Inn Hotel, Butler, Thursday evening, December 8, 1960. The usual social hour was held prior to the meeting and was followed by a delicious steak dinner.

Following the social hour and the meal the meeting was called to order by President James Pascoe. A short business meeting was held in which some matters were disposed of prior to the annual election of officers. Dr. Robert Magee, Eldorado Springs, was elected President; Dr. Jack Moody, Harrisonville, Vice President; Dr. Carter W. Luter, Butler, reelected Secretary-Treasurer.

Dr. Frank Tucker, Methodist minister of Nevada, made a fine talk relative to the cooperation of physicians and ministers in particular phases of their work. Rev. Tucker's talk was well received and it was appreciated that during the busy Christmas season he took time to give this program.

Those present were Dr. Jack Moody, Harrisonville; Dr. and Mrs. H. A. Tracy, Belton; Dr. Claude Allen, Rich Hill; Dr. and Mrs. B. O. Hartwell, Drexel; Dr. and Mrs. Robert Magee, Eldorado Springs; Dr. and Mrs. Gene Baska, Appleton City; Dr. and Mrs. Rolla Wray, Dr. James Pascoe, Dr. and Mrs. L. P. McCann, Dr. Roy Pearse, Nevada; Dr. and Mrs. C. A. Lusk and Dr. C. W. Luter, Butler.

Carter W. Luter, M.D., *Secretary*

EIGHTH DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Dallas-Hickory-Polk County Medical Society

A dinner meeting of the Dallas-Hickory-Polk County Medical Society was held in Bolivar on Wednesday night, December 14. Following dinner the formal meeting took place at the office of Dr. Doyle C. McCraw. Those present included six members of the medical society, namely: C. H. Barnett, M.D., Ben Koon, M.D., Doyle McCraw, M.D., Bolivar; Mary Griffin, M.D., O. A. Griffin, M.D., Buffalo; and George Robinson, M.D., Humansville. Guests were Walter Tillman, M.D., Springfield, Councilor of the district; M. L. Gentry, M.D., District Health officer; Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association, and John Buesseler, M.D., Head of the Department of Ophthalmology at the University of Missouri Medical School.

The group was small but showed much interest.

The scientific program for the evening was presented by Dr. Buesseler who showed a film entitled, "Inflammatory Diseases of the Eye," and then further discussed various points brought forth by the film. Numerous questions were asked by the audience and an excellent general discussion occurred. This particular program was another one of the pilot projects of the showing of special films before certain medical groups over the state in conjunction with a speaker

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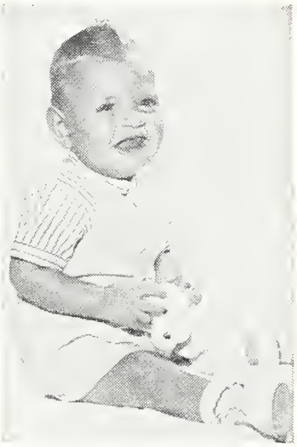
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selected to discuss the film and present additional information on the subject depicted by the film.

Mary E. P. Griffin, M.D., *Secretary*

Greene County Medical Society

A regular meeting of the Greene County Medical Society was held November 18, at the Holiday Inn with 66 members and three guests present. The President, Dr. Walter W. Tillman, Jr., presided.

Dr. Tillman congratulated Dr. Durward G. Hall upon his election to the Congress of the United States from the Missouri 7th Congressional District and Dr. Hall was given a rising ovation.

Upon motion from Dr. Siceluff, seconded by Dr. Marshall, the minutes of the October meeting were approved as published in the *Bulletin.*

The President reminded the members of the November 21, 1960, "Medicine 1960" show which will be on the subject, "Artery Reconstruction." He reminded committee chairmen that annual reports of committees are due in the Society office by December 10.

Dr. Tillman introduced Mrs. Edna Williams, President of the Greene County Medical Secretaries and Assistants Society, who discussed the advantages of local, state and national membership in the Medical Secretaries and Assistants Society and urged members of the Society to encourage their assistants to belong to this organization.

The Secretary, Dr. H'Doubler, presented the application of Dr. Richard W. Hollis for reading and vote. Upon motion by Dr. Marshall, seconded by Dr. Gose, Dr. Hollis was unanimously elected to membership.

The application of Dr. Raymond A. Christy, Jr., was presented for reading and vote by the Secretary and upon motion by Dr. Ivy, seconded by Dr. Park, Dr. Christy was unanimously elected to membership.

Dr. H'Doubler announced that copies of nine A.M.A. pamphlets suitable for placement in reception rooms had been obtained and will be distributed to the membership. Dr. H'Doubler urged that effective use of this material be made by the membership.

Dr. Eugene J. Schwartz, Chairman of the Nominating Committee, discussed the methods used by the committee in selecting nominees for the offices within the Society. He stressed that attendance at Society meetings and work on the council and committees are of particular importance. He then presented the following report for his committee:

"Mr. President and members of the Greene County Medical Society. Under the provisions of the By-Laws of the Greene County Medical Society, Chapter IX, Committees, Section II, entitled Nomination Committee, your Nominating Committee is charged with the responsibility of presenting, at this, the November meeting, one nominee for each vacancy to be filled at the business meeting in December. You are reminded that under the provisions of the By-Laws of the Greene County Medical Society Foundation, these same officers shall serve the foundation.

Your committee is pleased to present the names of the following members for your consideration:

For President-Elect, to serve as President in 1962, Dr. Stanley S. Peterson; for Secretary, the incumbent, Dr. F. T. H'Doubler, Jr.; for Treasurer, the incumbent, Dr. William F. Johnson; for a two-year term on the Executive Council, to fill the unexpired portion of Dr. Stanley Peterson's term, Dr. Kenneth E. Knabb; for the two three-year terms on the Executive Council, Drs. James T. Brown and H. B. Ivy; (automatically remaining on the Executive Council are Drs. Silsby and Lemmon with terms expiring in 1961 and Dr. Moseley whose term expires in 1962); for one-year terms as Delegates to the House of Delegates of the Missouri State Medical Association, the incumbents, Drs. Peterson, Ferguson and Kenneth Knabb; for one-year terms as Alternate Delegates to the Missouri State Medical Association, Dr. Bruce Lemmon, Jr., to serve as Dr. Peterson's alternate; Dr. F. T. H'Doubler, Jr., to serve as Dr. Ferguson's alternate, and Dr. Harry Silsby to serve as Dr. Knabb's alternate; for the three members at large to serve on the Nominating Committee with the three Past Presidents (Drs. Siceluff, Elkins and Tillman), Drs. Atkison, Callaway, Jr., and John W. Williams.

Following Dr. Schwartz's presentation, Dr. Tillman declared that in accordance with the by-laws additional nominations were open from the floor. There were none. Dr. Tillman announced that nominations would again be open from the floor at the December 23 meeting at which time the election will be held.

The President expressed particular appreciation to Dr. Ned White, chairman of the program committee, who has made excellent arrangements for the programs this year. He then presented Dr. White who introduced Dr. Vernon E. Wilson, Dean and Director of the University of

Missouri School of Medicine who discussed "The Future of Your Medical School."

Following Dr. Wilson's presentation, Dr. Tillman expressed appreciation to him for his appearance before this Society. There being no further business, the meeting was declared adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

Jasper County Medical Society

A regular meeting of the Jasper County Medical Society was held on December 13, 1960, at Wilders Restaurant, Joplin. The meeting was called to order by the President, Frank Birsner, M.D. Forty-one members were present.

Dr. O. T. Blanke, treasurer of the Society, read the treasurer's report. Upon motion duly made and carried, the report was approved as read. Upon motion made by Dr. John W. Koehler and seconded by Dr. Sam Grantham, it was

Resolved, That the president appoint a committee to study annual costs of the Society and to make recommendations as to the amount of yearly dues to be paid by members of the Society.

Thereupon, the president appointed Drs. O. T. Blanke, Foster Whitten, Burleigh DeTar, Sr., and Irwin Craig as members of the committee with Dr. Blanke as chairman.

The president requested the executive secretary to read the current financial statement prepared by Mr. Robert Higgs, Manager of the *Tri State Medical Bulletin*. Following a general discussion of the needs and purposes of the *Bulletin*, its financial condition and the financial condition of the Society, the following resolution was made and carried:

Resolved, That the *Tri State Medical Bulletin* be and the same is hereby discontinued, effective immediately.

The matter of whether or not the Society should approve a tuberculosis testing program came up for discussion. Comments and suggestions were made by Drs. Kiehl, Papp, Burleigh DeTar, Jr., Koehler, Birsner, Barnett, Wetzel, Hall, Burleigh DeTar, Sr., R. L. Ferguson and Powell.

Upon motion duly made and seconded the following resolution was adopted:

Resolved, That the Jasper County Medical Society does hereby approve the TB testing program for Jasper County, and that the officers of the Society be instructed to so inform officials of the Missouri State Health Department.

There being no further business to come before the meeting, upon motion duly made and seconded, the meeting was adjourned.

David Allen, M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society met at the Missouri State Sanatorium, Mount Vernon, at 7:30 p.m., on December 13, 1960. Following a fine dinner in the Sanatorium dining hall, the doctors met at the staff room of the new building and the Auxiliary met at the home of Mrs. Kenneth Glover.

A letter was presented from the Ozarks Regional Heart Association requesting approval of a heart fair to be held in Monett. This matter was referred to a committee made up of Drs. Mary Newman and Robert Donley from Barry County to report back at the next meeting. Dr. Taylor mentioned the request of his local extension agent for authorization to use the Drey Pak in Newton County and permission to get same. After discussion the motion was made by Dr. Fred Wommack to appoint a member from each county to act for the Society in these cases.

Dr. Sweany appointed the following nominating committee to meet and recommend a slate of officers for the following year: Drs. L. T. Taylor, Robert Donley and C. A. Brasher. The nominations made were as follows: President, Dr. J. R. Carter, Neosho; Vice president, Dr. W. J. Glass, Monett; Secretary-Treasurer, Dr. Fred Brown, Aurora. The motion was made by Dr. Kenneth Glover and seconded by Dr. Robert Donley that the slate be accepted and that further nominations cease and they be elected by acclamation. This was done.

The following delegates were then elected by the respective county members: Barry County—Dr. Mary Newman, Cassville; Alternate, Dr. Robert Donley, Monett; Lawrence County—Dr. Kenneth Glover, Mount Vernon; Alternate, Dr. A. J. Graves, Mount Vernon; Stone County—Dr. Fred Wommack, Crane; Alternate, Dr. A. P. Capetti, Crane; Taney County—Dr. J. M. Threadgill, Forsyth; Alternate, Dr. Roy Gillispie, Branson; Newton County—Dr. M. C. Bowman, Neosho; Alternate, Dr. George Blankenship, Neosho; McDonald County—Dr. J. J. Royce, Noel; Alternate, none; Christian County—Dr. Stanley Roper, Ozark; Alternate, Dr. Donald Rogers, Nixa.

The scientific program which followed featured Dr. J. Lewis Yates, Sanatorium staff, in a discussion of "Pleural Disease" with emphasis on diagnosis. He presented a series of 200 cases studied at the Sanatorium. Following completion of his paper, President Henry Sweany gave a short talk on medicine and impressions he acquired on his trip in September to Russia and Poland.

The meeting was then adjourned. The next meeting in January will be in Monett with Dr. Robert Donley to make the arrangements for the dinner.

A. J. GRAVES, M.D., *Secretary*

JASPER COUNTY MEDICAL SOCIETY

The regular November meeting of the Jasper County Medical Society was held on November 8, 1960, at the Drake Hotel, Carthage. The meeting was called to order by the President, Frank M. Birsner, M.D. Twenty-five members were present.

Dr. W. T. McNew introduced Drs. Daniel L. Yancey and Charles J. Ash, both of Springfield, the speakers for the evening. Dr. Ash's topic was "Supracondylar Fractures of the Humerus in Children." Dr. Yancey's topic was "Femoral Head Replacements." Following the talks a general question and answer period ensued.

In the short business session that followed, Dr. R. E. Kirschman called attention to disaster relief matters in the area, and a discussion ensued on ways and means of setting up a field hospital in a proposed trial run.

Discussion also ensued on recognition and attendance by members at funerals of members of the Society. The President appointed a committee to notify members of the Society the dates and times of such funerals.

There being no further business to come before the Society, the meeting was adjourned.

DAVID ALLEN, M.D., *Secretary*

NINTH DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

MID-MISSOURI COUNTY MEDICAL SOCIETY

A dinner meeting of the Mid-Missouri County Medical Society, the doctors' wives and the staff members of the Phelps County Memorial Hospital and their wives was held at the Pine Room, Greyhound Bus Station, in Rolla, Thursday night, December 15.

A social hour well initiated the evening festivities which was followed by a bountiful turkey dinner.

The scientific program for the evening was presented by Robert L. Jackson, M.D., Professor and Head of the Department of Pediatrics at the University of Missouri Medical School, Columbia. Dr. Jackson, who is nationally known as an authority on child nutrition, spoke on "Newer Developments in the Management of Diabetic Children." This was an excellent discussion and well received by those present.

M. K. UNDERWOOD, M.D., *Secretary*

TENTH DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY

The Butler-Ripley-Wayne County Medical Society met at the Hickory House, Poplar Bluff, at 6:30 p.m., Deeember 12, for its regular monthly meeting.

The first order of business was the election of officers. Officers elected for 1961 were: President, Dr. Fred Kneibert; Vice President, Dr. Cyril Post; Secretary-Treasurer, Dr. E. T. Hansbrough; Delegate from Butler County, Dr. Fred Biggs; Alternate Delegate from Butler County, Dr. B. M. McLain; Delegate from Ripley County, Dr. Frank Johnson; Alternate Delegate from Ripley County, Dr. Tom Burcham; Delegate from Wayne County, Dr. H. H. Cline.

The professional part of the meeting centered on "Office Gynecology" with Dr. Garth Jarvis, St. Louis, conducting the program. Dr. Jarvis, formerly a professor and head of the Department of Obstetrics and Gynecology at the University of Texas at Galveston, Texas, presented a most interesting discussion of "Office Gynecology and Obstetrics," with numerous questions being proposed from the floor.

The meeting was exceptionally well attended by the local members. The session was adjourned at 9:30 p.m.

E. T. HANSBROUGH, M.D.
Secretary-Treasurer

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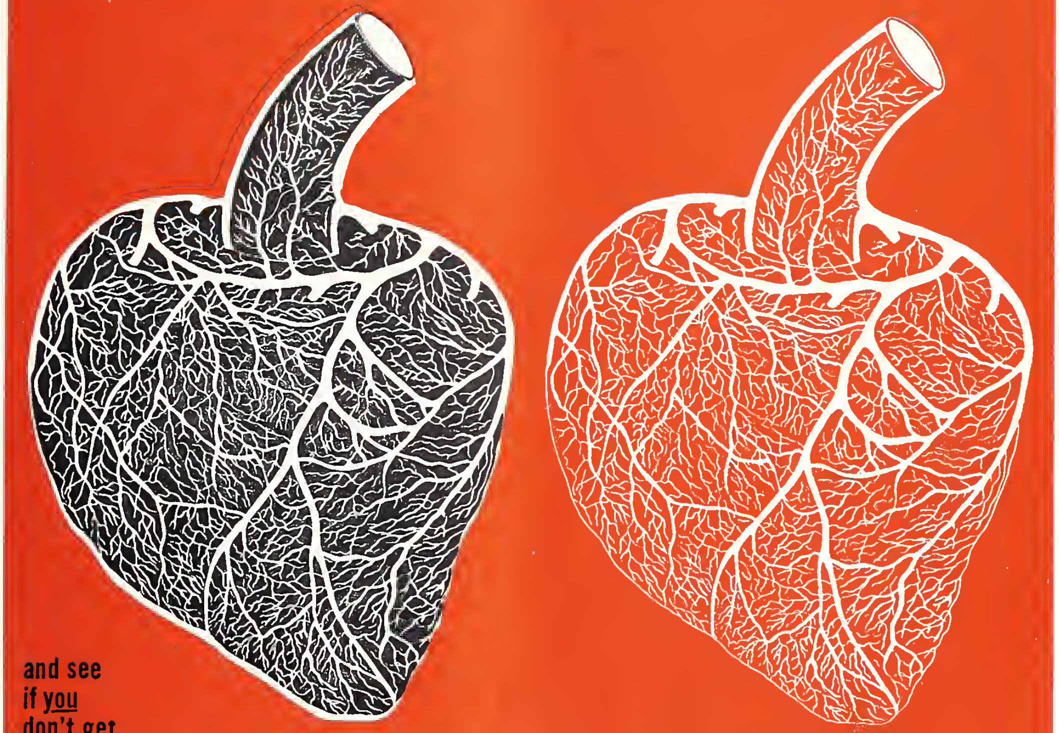

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The Council

The Council met at Hotel Chase, St. Louis, on December 10, 11, 1960, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell, R. O. Muether, St. Louis; J. H. Summers, Lebanon; John I. Matthews, Jefferson City; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Byron M. Stuart, Boonville; Paul R. Whitener, St. Louis; O. B. Barger, Harrisonville; K. C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; Messrs. John R. Buckner, Springfield; W. H. Bartleson, Kansas City; Hollister Smith, Robert Duffey, Lemoine Skinner, Jordan Singleton, Tom R. O'Brien, Ray McIntyre, and Helen Penn, St. Louis. Present during parts of the meeting were Drs. Joseph B. Kendis, T. J. Cooper, James N. Haddock and Charles Miller, St. Louis County; Carl D. Siegel, Sedalia; Stanley S. Peterson, E. J. Schwartz and Durward G. Hall, Springfield; Earl L. Loyd and H. M. Hardwicke, Jefferson City; Vernon E. Wilson, Columbia; Mr. Edgar Mothershead, St. Louis.

REPORT OF EXECUTIVE SECRETARY

Mr. O'Brien reported attendance by himself and Dr. Muether at the Missouri Hospital Association meeting in Kansas City in November, and told of a panel on "Hospital-Physician Relations." He said that Congressman Richard Bolling spoke at the meeting favoring the enactment of the Forand bill or similar legislation by the 1961 Congress.

Correspondence: Letters in answer to congratulatory letters written to the recently elected Missouri Governor and members of Congress were read.

Radiologic Society: It was announced that the Missouri Radiologic Society had been organized recently and that the organization wished to meet at the time of the Annual Session.

PUBLIC SERVICE PROGRAM

Excerpts from the report of the Public Service Committee, as given by Dr. Muether, are as follows:

The original resolution of the House of Delegates, suggesting generally a program of advertising to publicize the positive programs of medicine—particularly those pertaining to guarantees of medical care for the indigent and aged, was reviewed. After investigation, it was apparent that an effective paid advertising program as originally contemplated would be expensive in the extreme.

The Association has been successful in publicizing several of the favorable projects of medicine—the AMEF Campaign, the Preceptorship Program, the new MSMA Student Loan Fund, and our Student Honors Awards.

The Woman's Auxiliary has accepted the job of compiling information for the directory of state health resources and the first pilot study is being done in Lafayette County under the auspices of Mrs. Jordan Kelling, President of the Woman's Auxiliary.

Statistics relative to the present status of the Student Loan Fund show that a total of 34 loan applications were received, of which 21 were granted, for a total of $14,665. Several are pending in the amount of $2,600 or a total of $17,265. Papers to provide Incorporation of the Foundation have been prepared and will be presented later.

It was recommended that the Council make recommendations to the House of Delegates regarding implementation of the Mills-Kerr Bill. The first important question being whether or not the Association should press for the adoption of the Mills-Kerr provisions in Missouri, and, if so, up to what level of state appropriations. The second question is what the Association should advocate as far as the provisions of an expanded Vendor program are concerned.

No action was taken on the report.

Materials covering "Missouri Directory of Health Resources" and questionnaires, a proposed letter concerning the Student Loan Activities, and reports from various counties on health care within those counties were given each Councilor for study.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on the preceptorship program and stressed the importance of the program. He said that only 11 students had elected to be preceptees this year compared to 18 last year.

Mr. McIntyre reported on some outstanding county society meetings held recently, several of which had been combined meetings with members of the bar.

A.M.A.

Dr. Hall reported briefly on the A.M.A. Clinical Session and said that a full report prepared by Dr. Kiene would appear in MISSOURI MEDICINE. He urged that the Association support implementation of the Mills-Kerr bill in Missouri.

Mr. O'Brien reported to the Council that Dr. Hall had been recognized on the floor of the House as a newly elected Congressman and that Dr. Hall gave a short interesting report on "Campaigning in the Ozarks."

HOPE

Dr. Hollweg reported on attendance at a meeting of the People to People Foundation, the organization sponsoring the hospital ship HOPE. Work of the organization was discussed and the following resolution was adopted on motion, duly seconded:

WHEREAS, The People-to-People Health Foundation (and its Project HOPE) has been established to bring the skills and technics developed by the American medical and allied professions to other nations of the free world in their own environment, adapted specifically to their needs and their ways of life, and

WHEREAS, The Foundation depends on the support of the American people led by doctors of medicine, the allied professions, business and industry, and

WHEREAS, Many doctors of medicine, local, state and national medical organizations have endorsed the Foundation's program, and

WHEREAS, A number of members of the Missouri State Medical Association have expressed interest in serving on a representative committee of doctors of medicine in our state, therefore, be it

Resolved, That the Missouri State Medical Association endorses and commends the interests and objectives of the People-to-People Health Foundation and the work of a Missouri Physicians Committee for the People-to-People Health Foundation.

It was pointed out that an active committee in the state would assist in giving people opportunity to contribute, give leadership in the project, obtain publicity and review applicants for service in the project.

The Chairman appointed a committee of Dr. Hollweg, chairman, Dr. Furlow and Dr. Tillman.

GRAND RIVER PLAQUE

A plaque which the Grand River Medical Society presents to its retiring presidents was shown and it was suggested that other societies might wish to do something similar.

LEGISLATION

Mr. O'Brien reported that an amendment had been prepared on the joint licensure law which would strike out that portion licensing an individual physician; also an amendment to raise the cost of the examination from $12.50 to $20.00. He said that these might require correction when the new Statute books come out, giving correct section numbers.

He said that other legislation may include a bill on immunization of children which is being sponsored by the Junior Chamber of Commerce, and which will be reported on by the Committee on Infant and Child Care; physical therapy licensure, which has been studied and changes suggested; medical-legal examiner system, to be reported on by the Committee on Laboratory Medicine. He said that other legislation might include action concerning the vendor program, mental health legislation, Division of Health proposals, and University of Missouri appropriations.

ANNUAL SESSION

Dr. Matthews reported on the Annual Session, giving a schedule of events and the scientific program. He said that the principal changes from previous years would be a dinner on Sunday evening, complimentary to county society presidents and secretaries and their wives and to new members and their wives, and open to other members by subscription; a subscription luncheon meeting on Monday noon for the formation of a 50 Year Club; a breakfast meeting as the final session of the House of Delegates on Wednesday morning, complimentary to members of the House of Delegates and open to any other members by subscription.

LABORATORY MEDICINE

Dr. Cooper gave the following report for the Committee on Laboratory Medicine:

Division of Health—Laboratory Services

The Committee reviewed the memorandum of H. M. Hardwicke, M.D., dated September 15, 1960, relating to laboratory services to be offered to physicians by the Division of Health. The Committee concurs with Dr. Hardwicke's previously announced policy for cutting down on the handling of routine serologies by the Division of Health laboratory. Though the Committee recognizes that for some time it will be necessary for the Division of Health to provide these services to some physicians, it was pleased to note that in the past year the number of such serologies was considerably reduced in line with Dr. Hardwicke's expressed wish that more and more of such work be sent by doctors to private laboratories.

The Committee once more wishes to call attention to the previously announced agreement of the Missouri Society of Pathologists that laboratory procedures will be performed without charge by pathologists when the submitting physician indicates that the patient is indigent.

In his memorandum of September 15, Dr. Hardwicke set out in detail five major specialized services he believes his laboratory may valuably offer to the practicing physicians of the state. These relate to (1) phage typing of coagulase positive hemolytic streptococcus aureus; (2) rapid identification of rabies; (3) the rapid identification of type A beta hemolytic streptococci; (4) epidemiological surveys; (5) consultant services for medical records librarians.

It is the recommendation of the Committee on Laboratory Medicine that the Division of Health be encouraged to make these services available to physicians throughout the state on request.

Medico-Legal Examiners

The Committee considered a draft of a proposed act, known as House Bill 339, which was introduced in the 1955 session of the Missouri Legislature, pertaining to the establishment of a state Medico-Legal Examiners System in lieu of the Office of the Coroner. The Committee reviewed the first seven sections of the act (21 sections) and agreed to meet at a later date to review the remainder as well as the changes which were recommended by the various members.

The Committee recognized that it would not be feasible to have the bill in finished form for introduction into the session of the legislature which will begin in January, 1961. The Committee will continue its study and when its draft is complete will review it with an appropriate committee of the Missouri Bar. The final draft will then be available for action by the House of Delegates at the 1962 Annual Session and for submission to the legislature in January, 1963. It is the judgment of the committee that no speedier action on this matter would be prudent or possible.

On motion of Dr. Furlow, duly seconded, the report was accepted.

ST. LOUIS COUNTY PLAN

Drs. Kendis and Miller explained to the Council the plan that has been established in St. Louis County to care for the elder citizen who is in need of reduced medical costs. The plan entails a card to be presented by the patient to the physician, showing what reduction, if any, he should have in cost of his care. These cards are issued after application to and study by the society. It was reported that 265 doctors are participating in the plan at present. Good publicity was reported in the *Globe-Democrat* and the plan was reported to the AMA Public Relations Conference. It is hoped that druggists will participate in the program. It was estimated that 20 per cent of persons over 65 may be eligible for reduced rates.

On motion of Dr. Matthews, duly seconded, Drs. Kendis and Miller were thanked for their report and the Society commended for this work.

CIVIL DEFENSE

Dr. Siegel presented the following recommendations from the Committee on Civil Defense:

1. The MSMA Committee on Civil Defense Disaster Medical Care should make every effort to support all types of Civil Defense activities in the state, offering medical leadership in the development of all such programs.

2. It was recommended that MSMA take steps to ini-

tiate a Governor's Civil Defense Advisory Committee. This committee would serve as advisor to the Governor on aspects of Civil Defense. Lists of names submitted by MSMA to the Governor for appointment to serve on the Advisory Committee should consist of physicians who are familiar with disaster medical care, and be men of such stature as to influence organizational medicine and the state legislature. It was suggested that the Advisory Committee meet quarterly and that meetings be open to non-medical groups and individuals interested in Civil Defense.

3. A recommendation was made that the Chairmen of the C.D. Committees of various organizations meet quarterly to discuss and coordinate activities. Such interassociation conferences could be called by the State Division of Health. Objectives of the interassociation group would include: (a) Manpower—inventory available medical and para-medical personnel throughout the state; (b) Training—working in conjunction with the U. S. Public Health Service, packets of educational material could be developed, along with films, slides, etc.; (c) Utilization of Facilities—plans could be developed for proper utilization of 200-bed pre-positioned Civil Defense hospitals in the state.

4. It was suggested that the Chairman and Vice-Chairman of the MSMA Civil Defense Committee be appointed to serve for three-year terms. The Vice-Chairman would succeed as Chairman. Members of this committee should include medical representatives from Kansas City, St. Louis and the three medical schools in the state—at Missouri, St. Louis and Washington Universities.

5. The Chairman of the MSMA on Civil Defense was requested to secure approval of the MSMA Council at next meeting in December of recommendations for: (a) a Governor's Civil Defense Advisory Committee and (b) establishment of similar advisory committees in each county.

6. It was suggested that the MSMA Council be advised that 1.5 million copies of a new pamphlet, "Two-Week Survival in a Shelter," will be available for distribution in the state on or about January 1, 1961.

7. It was recommended that the Committee have a half-day Civil Defense meeting on Sunday, March 19, just prior to the start of the Annual Session. Wives could be invited to attend, and a recognized authority on Civil Defense be presented as guest speaker.

8. The Committee members feel that all Civil Defense activities should eventually be paid for with tax funds. It was suggested, however, that the Chairman request an annual MSMA appropriation of $1,000 to help defray Committee members' necessary expenses until such time as the state legislature appropriates money for this purpose.

9. The Chairman will also seek Council approval of a request for booth space at the 1961 Annual Session for display of a scale-model C.D. hospital.

10. It was recommended that the Committee work with deans of the three medical schools in Missouri and the M.E.N.D.S. coordinators to implement annual area test alerts.

11. It was recommended that the MSMA Executive Secretary, the Chairman and members of the MSMA Civil Defense Committee, the Director of the Missouri Civil Defense Authority, County Medical Society Civil Defense Chairmen and local Public Health officers meet to formulate a uniform C.D. plan for the entire state.

12. It was suggested that each member of the MSMA Committee on Civil Defense be assigned the responsibility for maintaining contact with one of the other professional groups in the state which are interested in Civil Defense, i.e., osteopaths, dentists, nurses, veterinarians, et al.

Dr. Siegel announced a one-day course in Civil Defense, entitled, "Early Care of Multiple Injuries" to be presented at the University of Missouri Medical Center on April 1.

On motion of Dr. Stuart, duly seconded, a scientific exhibit at the Annual Session was approved.

On motion of Dr. Hollweg, duly seconded, the report was accepted with the provision that requests for appropriations be brought to the attention of the Council as they become necessary in the working of the Committee.

CORPORATE PRACTICE

Corporate practice and the work of the committee appointed to make such a study was discussed briefly. It was pointed out that actions by the A.M.A. had made this work much more indefinite but that the committee was continuing its study.

TREASURER'S REPORT

Dr. Doyle reported on the financial status of the Association and the investments.

On motion of Dr. Barger, duly seconded, the report was accepted.

BUDGET

Dr. Doyle presented the following proposed budget for the calendar year 1961:

Salaries	$ 65,700.00
Office Rent & Light	4,700.00
Postage	4,000.00
Printing, Stationery, Office Supplies	4,000.00
Jrl. Expense, Paper & Printing	52,000.00
Telephone & Telegraph	3,000.00
Insurance, Employees Pension Plan	7,187.00
Professional Fees	4,000.00
Taxes Payroll	1,900.00
Travel Expense	6,000.00
Committees	37,850.00
Furniture & Fixtures	1,000.00
General Expense	3,000.00
Total	$194,337.00

STUDENT LOAN FUND

On motion of Dr. Whitener, duly seconded, it was voted to appropriate $25,000 from current funds for the Student Loan Fund. It was suggested that as soon as the legal status of the fund could be cleared for tax exemption, means should be set up to make contributions possible.

MENTAL HEALTH

Dr. Haddock presented the following report for the Committee on Mental Health:

Purpose

Dr. Haddock stated that the purpose of the meeting was to discuss legislation and changes in laws as proposed by the First Missouri Mental Health Conference, held in Jefferson City, September 8, 9, 1960. A digest of the proposed legislation included the following:

Juvenile Code

Amendment to the Juvenile Code to permit return of the child to the court when he is found not to be in need of state mental hospital care. This is aimed at relieving the congestion of the children's ward brought on by dumping problem children of all types. Dr. Duval explained that this change was primarily aimed at allowing the state hospitals to return children no longer in need of hospitalization to the training schools at Boonville and Chillicothe.

After discussion, this proposal was approved by the Committee.

Non-resident Mental Patients

The following résumé of the situation on non-residents needing mental care was presented: "Measure to enable state to arrange for transfer of non-residents to the proper state. Only the Inter-State Mental Health Compact provides this now."

Dr. Duval pointed out that the Inter-State Mental Health Compact is not a legal transfer and is based only on "where is better for patient." This proposal was approved by the Committee.

Division of Mental Health

A proposal that the name be changed from the Division of Mental Diseases to the Division of Mental Health was approved.

State Hospital Names

A proposal that the state hospitals not be termed Nos. 1, 2 and by number but be known by the name of the town in which they are situated, as the Fulton State Hospital, and was approved by the Committee.

Sex Offenders

The following digest of proposed legislation on sex offenders was presented: "An act relating to treatment of sex offenders. This provides for a return of the person to the court for their disposition if the state hospital does not recommend specialized treatment for his mental disorder."

It was pointed out that the state hospitals are unable to treat many of these sex offenders because of their lack of cooperation, and in a few instances they are dangerous enough to create security problems. At present all that the hospital can do is keep these individuals locked up. This proposal was approved by the Committee.

Criminally Insane

The following proposal concerning discharge of non-insane criminals was presented: Proposal providing that discharge from the state hospital of patients found not guilty of a crime by reason of insanity shall be the responsibility of the superintendent and the proper court jointly.

It was pointed out that at the present time the superintendent of a state hospital may discharge a patient not guilty of a crime by reason of insanity (other than in murder cases) without consulting anyone. After brief discussion this proposal was approved.

The matter of improving psychiatric court testimony was discussed. This included possible use of the Durham rule instead of the McNoughton principle, and the institution of some practice providing for independent psychiatric testimony as now used under the Briggs law in Massachusetts. Dr. Duval stated that his office is using every opportunity to advance these proposals, but that the final responsibility must come from the legal profession.

County Patients

A proposed act to abolish the present system of "county patients" in State Mental Hospitals brought forth considerable discussion.

It was pointed out that at the present time about 85 per cent of all patients admitted are "county patients" for which the counties pay $6.00 per month per patient to the hospital involved. The average monthly cost at present is $138.00 per month. The income from "county patients" to all hospitals is about $1,300,000 per year.

Since the original intention was that counties should pay about 25 per cent of the cost, it would be necessary to increase the county share from $6.00 to $34.50 per month per patient.

The Committee agreed generally that the A.M.A. statement of principle pertaining to patient care, namely, that the individual is responsible for the payment of medical expenses and for those of his family is followed by most physicians. When the individual in unable to pay his expenses, the local community or county, the state and federal government, in that order, should be considered as the resources for the payment of medical expenses.

It was pointed out that the elimination of the county or community as a source of payment would remove a cornerstone in the above mentioned set of principles even though the amount paid at present, $6.00 per month, is a very small part of the average cost.

Another point which was stressed was that the proposed legislation makes no differentiation between charity and private patients. All patients would be subject to a means test, which would determine the ability of the patient to pay. Members of the Committee suggested that the state hospitals would be competing with the private practice of medicine unless safeguards were included in the act.

Dr. Duval agreed to insert changes in the proposed law which would clarify the position of the medical profession. Such wording would include a statement that persons who are able to pay for their own treatment, and when private treatment facilities are available, would not be eligible for admission to state hospitals.

Dr. Duval stated that a definite decision had not been reached as to the introduction of this proposed act. He was aware of the fact that the legislature might be limited in its ability to appropriate funds. He stated also that the Division of Mental Diseases has recommended that the farming and dairying phases of state mental hospital operations be eliminated because it is believed that the cost of operating the farms and dairies greatly exceeds the returns. If this is approved, he hopes that the savings may be used for general operations.

Since it is dependent on future decisions relative to the farms and dairies, the legislation probably will not be introduced in 1961. The Committee deferred action on this proposal.

Community Mental Health Services

The following proposal concerning community mental health services was presented:

Proposal to develop community mental health services. Communities may raise funds on a 50-50 basis. A local board will be appointed, but all appointments and policies must be approved by the Director of the Division of Mental Health. These centers will provide preventive services, educational services, consultative services, out-patient diagnostic and treatment services, in-patient psychiatric service in general hospitals, and rehabilitative services. Those able to afford private care are not eligible.

It was pointed out in discussion that there was a divergence of opinion concerning the personnel in the administration of such services, whether it should be from the local level or the state level. It was pointed out that the attitude of the legislature would probably be that if the state contributed funds, that it should have control.

The hope that this program would bring more practicing psychiatrists into the state was expressed.

It was pointed out that probably very few of the proposed community centers will be established because of lack of the necessary local matching funds.

No action was taken by the Committee.

Conference on Mental Health

Dr. Haddock presented a brief outline of the proceedings of the Sixth Annual Conference of Mental Health Representatives of State Medical Associations which was held in Chicago at the A.M.A. headquarters in November of 1959.

Mr. O'Brien reported that Dr. Duval had later stated that no attempt would be made to change the present county patient set-up, and that also legislation to provide the community service project might be changed. Efforts will be made by the Division to secure appropriations for additions to the State Schools for Retarded at Higginsville and St. Louis; also an effort will be made to secure sufficient funds to complete the fourth floor of the new building at St. Louis State Hospital.

The possibility that the present trend in work of the Division of Mental Disease toward prevention of disease and whether or not the proposed community service legislation may be leading to conflict with private practice was discussed.

On motion of Dr. Tillman, duly seconded, the report was accepted with the recommendation that the committee carefully examine the finally drafted legislation to the end that patients be referred to community mental health clinics only on referral of physicians.

INFANT AND CHILD CARE

Dr. Schwartz gave the following report for the Committee on Infant and Child Care:

Legislation on Immunization

Legislation on immunization was discussed in general, it being pointed out that pre-school immunization was of great importance with the responsibility resting principally with the parent. It was pointed out that legislation making later immunization compulsory might encourage early immunizations.

Proposed Bill

The following proposed legislation, sponsored by the Missouri Junior Chamber of Commerce, was presented:

An Act

"RELATING TO THE POWERS OF THE STATE DEPARTMENT OF PUBLIC HEALTH: PROVIDING FOR THE IMMUNIZATION OF SCHOOL CHILDREN: PROVIDING EXEMPTIONS: PROVIDING PENALTIES: AND REPEALING R.S. 1939, 8-10341.

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSOURI.

"Section 1. IMMUNIZATION REGULATIONS. The Department of Public Health and Welfare shall, after consultation with the Department of Education, promulgate rules and regulations governing the immunization against poliomyelitis, smallpox and diphtheria, to be required of children attending public, private, parochial or parish schools. The immunizations required and the manner and frequency of their administration shall conform to recognized standards of medical practice. The Department of Public Health and Welfare shall supervise and secure the enforcement of the required immunization program.

"Section 2. UNLAWFUL TO ATTEND SCHOOL UNIMMUNIZED—UNLAWFUL TO REFUSE TO PERMIT IMMUNIZATION. It is unlawful for any student to attend school for longer than one month unless he has been immunized, as required under the rules and regulations of the Department of Public Health and Welfare, and can provide satisfactory evidence of such immunization. Provided that, if within the month, he produces satisfactory evidence of having begun the process of immunization, he may continue to attend school as long as the immunization process is being accomplished in the prescribed manner. It is unlawful for any parent or guardian to refuse or neglect to have his child immunized, as required by this section, unless the child is properly exempted.

"Section 3. EXEMPTION FROM IMMUNIZATION. Any minor child through his parent of guardian may file with the health authority charged with the duty of enforcing the immunization laws the certificate of a duly licensed physician stating that the physical condition of the child is such that immunization would seriously endanger the life or health of the child; or upon affidavits from an officer of a recognized religious denomination that such child's parents or guardians are bona fide members of a denomination whose religious teaching requires reliance upon prayer or spiritual means alone for healing. Upon filing of such certificate, the child is exempt from the legal requirement of immunization for a period not to exceed nine months, on the basis of any one certificate.

"Section 4. SUPERINTENDENT—DUTY TO REPORT. It is the duty of each school superintendent, whether of a public, private, parochial or parish school, to cause to be prepared a record showing the immunization status of every child enrolled in or attending a school under his jurisdiction. The name of any parent or guardian who neglects or refuses to permit a non-exempted child to be immunized against diseases as required by the rules and regulations promulgated hereunder shall be reported by the school superintendent to the Department of Public Health and Welfare and the prosecuting attorney or circuit attorney of the county in which the school is located within thirty-five days after the child is enrolled or begins attending.

"Section 5. WHO MAY IMMUNIZE—WHO MUST PAY. The immunization required may be done by any duly licensed physician or by someone under his direction. If the parent or guardian is unable to pay, the child shall be immunized at public expense in a manner to be determined by the Department of Public Health and Welfare and the school superintendent.

"Section 6. SOURCE OF FUNDS. Funds for the administration of this act and for the purchase of vaccines for children of families unable to afford them will be appropriated to the Division of Health from general revenue.

"Section 7. PENALTY. Violation of any provisions relating to the immunization of school children is a misdemeanor.

Legal Report

Dr. Schwartz reported that the proposed bill had been studied by attorneys for the Association and the following report was presented:

"Proposed Immunization Bill of Junior Chamber of Commerce.

"From an examination of a proposed bill by the Missouri Junior Chamber of Commerce, I would like to make the following observations:

"TITLE. The title to the proposed bill repeals R.S. 1939, Sec. 10341, which should more properly be referred to as R.S. Mo. 1949, 163.360, the present identification of the statute. This statute deals with a different subject matter than the title, in that it deals with school attendance while afflicted with any contagious or infectious disease. This statute is needed in view of the compulsory school attendance section R.S. Mo. 164.010, and should not be repealed. If it is repealed, parents of children with infectious and contagious diseases could send such children to school; in fact, the attendance law would require them to.

"ENACTING CLAUSE. The enacting clause of the bill is improper.

"Section 1. Section 1 and the following sections have certain titles to the section which are improper draftsmanship. This section would place the authority for promulgating rules and regulations in the Department of Public Health and Welfare. This properly should be in the Division of Health. By setting out poliomyelitis, smallpox and diphtheria, any other contagious or infectious diseases would be excluded. The requirement extends to public, private, parochial or parish schools. It is questionable whether this legislation should cover private schools as they do not come under any regular state enforcement or regulation. The question of 'recognized standards of medical practice' is one about which there might be much confusion.

"Section 2. The question of 'satisfactory evidence of such immunization' should be spelled out.

"Section 3. The words 'immunization would seriously endanger' might give rise to questionable interpretation; the exemption under 'recognized religious denominations' gives rise to many problems. It is understandable that, to lessen opposition, exemption might be desired for those who do not believe in immunization, but if an immunization law is desired and is to be effective, it should apply to all who attend schools and I think, would come under authority of the general police powers of a legislature.

"Section 4. This section deals with the reporting and the keeping of a record of those refusing to permit compliance with the act and the first stage of the prosecution of such. It does not fix the responsibility of enforcement upon the state division.

"Section 5. This section does not take into consideration proper requirement for private practicing physicians nor does it define those 'unable to pay.' It does not properly place responsibility for either determination or enforcement; it would leave considerable doubt as to procedures.

"Section 6. This is a statement that funds should be appropriated from general revenue, and would eliminate by statute the use of Federal participating funds, if such were available, for that purpose.

"If immunization of school children is a desirable program, it would perhaps be better to have a bill having more teeth in it and made applicable to all children attending public schools.

"Under the police powers of the state, it could be made applicable to all schools; but due to other statutes dealing with the public schools, it would perhaps be best to have two bills, one applying to private schools, the other applying to public schools. The management, organization and control of private schools is not governed by statute, except in rare instances; and statutes dealing with such should not be confused with statutes dealing with public schools. There is involved in this type of legislation a question of constitutionality if it excludes some and does not apply to all. The legislation is either good or bad as a health measure. If it is good, then its fullest benefits will come from a rigid application to all those attending."

Discussion

In discussion it was brought out that there might have to be exclusions in the bill for religious beliefs, although in some states this is not done; the proper placing of policing powers in the bill; whether immunization reports should go to the Division of Health or the Department of Education; the need for a long-range educational program to promote early immunizations by family physicians in connection with such legislation; the use of present law which allows suspension of a pupil "if he or she deviates from normal"; the shortcomings of mass immunizations; the need for some plan whereby children below school age would have immunizations; whether or not the proposed law is a public health function; the help that P.T.A. organizations and women's clubs can give to an educational program.

Action

On motion of Dr. Kinder it was voted that the Committee go on record as favoring such legislation on immunizations as proposed by the Junior Chamber of Commerce but with modifications as brought out in the analysis by the MSMA legal counsel and at the same time expressing the feeling that these immunizations should be at an earlier age. Also, it was felt the Junior Chamber might benefit by studying other states' laws pertaining to immunizations and their experiences.

Members of the Department of Education and the Division of Health who were present, expressed agreement with the motion.

Immunization Levels

Dr. Belden presented charts showing results of immunization surveys of first grade children in 12 counties which were conducted in the spring of 1959 by querying parents of first graders, and approximate levels of immunization coverage of pre-school children conducted by household interviews in the fall of 1959 in Jefferson County, five areas in Kansas City and nine areas in St. Louis County. He pointed out that epidemics are more likely to occur where immunization levels are low. He called attention to the lower level of immunizations under 2 years of age as compared to those by age 6 or 7 and stressed the importance of getting the immunizations started earlier to protect this most susceptible age-group.

Tuberculosis Testing in Schools

Dr. Meinershagen explained that tuberculosis case finding by mobil unit had been discontinued and reported on the pilot case finding study conducted by the Division of Health with cooperation of the medical society in Newton County. This was done by Mantoux test. He explained that it was tied in with school certification and that 49 schools received certification which indicated that 80 to 95 per cent of school children and 100 per cent of school personnel had been checked. He reported that six cases of tuberculosis had been found and that 15 suspects were still under study. He said that McDonald, Randolph and Macon Counties were now conducting surveys and said that it is hoped that more counties will do this. He said that P.T.A. organizations and local TB societies were interested and might spearhead the work in other counties.

Discussion

In discussion, the Patch and Mantoux tests were discussed in regard to schools and the private physicians' office; the efficiency of mass testing; the possibility of getting more physicians to test routinely in their offices; the general health education value of such programs.

Action

On motion of Dr. Magness, it was voted that the committee accept the report of the work done in Newton County with appreciation and recommend that a letter go to county society presidents, or chairman of child health committee in counties which have such a committee, calling attention to this work and recommending and urging that consideration of a similar type case finding program be carried out in their counties and also recommending that physicians be encouraged to do testing in their offices. It was recommended that a pamphlet, "School Certification Program for Tuberculosis Control," explaining a Tuberculin Testing Program for schools, go with the letter.

Immunization of Children

Dr. Schwartz asked that all members of the Committee study the situation on immunization of children in their own communities and study possibilities of improving it.

School Health Plan of St. Louis County

Dr. Magness explained briefly a St. Louis County School Health Program which has recently gotten under way. This was developed by the St. Louis County Health Department and the School Administrators of the county. He said that he would report to the Committee later in more detail.

Dr. Schwartz said that he would be unable to attend the A.M.A. Conference on Physicians and Schools and asked that Dr. Magness be designated to attend with expenses paid.

On motion of Dr. Muether, duly seconded, the report was accepted.

On motion of Dr. Stuart, duly seconded, Dr. Magness was designated to attend the conference with expenses paid.

DIVISION OF HEALTH

Dr. Hardwicke expressed appreciation to the Council and the committee which reviewed the report of the Division of Health and the budget that will be requested of the legislature.

Dr. Matthews reported for the committee which studied the report. He said that this year the plan was in effect before the committee was appointed and suggested that next year a committee study the plans before they are put into effect. He said that the request for the next biennium budget had been approved by the committee and moved that the Council approve it. On second by Dr. Barger approval was voted.

CARDIAC DISEASES

Dr. Loyd gave the following report for the Committee on Study of Cardiac Disease:

Purpose

Dr. Loyd stated that the purpose of the meeting was to discuss the question posed by Dr. Hardwicke concerning the use of federal appropriations of heart disease. The question presented was whether or not the Division of Health should continue to furnish grants to St. Louis University School of Medicine for postgraduate medical education or should all funds be utilized for other programs.

Use of Funds

Dr. Hardwicke outlined the possible uses of the federal funds as postgraduate education, furnishing prophylactic drugs for indigent heart patients and furnishing laboratory facilities for diagnosing hemolytic streptococcus. It was pointed out that the funds may be used for any purpose except therapy. Dr. Hardwicke said that all funds could be used on postgraduate education, or that all funds could be used in the other fields outlined but that there were not sufficient funds to carry out each program to a full extent.

Present Program

The present program was outlined as including postgraduate assistance to St. Louis University (the only school requesting this in the last year but others now requesting assistance), a rheumatic fever register and some help with furnishing of prophylactic antibiotics, for cardiac clinics in Kansas City, St. Louis, Children's Cardiac Center, Kansas City, and laboratory service planned to assist physicians in diagnosis of hemolytic streptococcus.

St. Louis University

It was agreed that no change in furnishing funds to St. Louis University School of Medicine be made during the current fiscal year ending June 30, 1961.

Program to Be Outlined

Dr. Hardwicke was asked to supply the committee with a full report on the program now in existence and to give an outline of what might be done with the funds. Committee members would be expected to return comments on the plans.

Cardiac Clinics

Dr. Martt reported that the University of Missouri Medical School was considering establishment of traveling Cardiac Field Clinics which would include case findings, consultative service and epidemiological studies and surveys pertaining to heart disease. This is being considered in part because it is felt that many indigent cardiac patients are unable to make the trip to the Medical Center at Columbia because of financial or physical reasons. Staffing of these clinics would be by members of the staff of the University of Missouri Medical School and it is hoped that a Grant will be obtained from the USPHS to assist with the costs. It is further hoped that portable x-ray equipment of the Division of Health might be available. The possibilities of fluoroscopic equipment being used was discussed. It was decided that this matter be placed before the Council of the Association and that if approved, contact be made with the various medical societies prior to any field trips. It was felt that the Heart Association might assist in making appointments and doing other preliminary work.

The clinic proposed by the University of Missouri Medical Center by Dr. Martt was felt to need more study before implementation and on motion of Dr. Tillman, duly seconded, it was voted to accept the report with the suggestion that the clinics receive further study by the committee and report back to the Council at a later date.

COMMITTEE ON AGING

Dr. Peterson reviewed the history of the White House Conference on Aging, pointing out that the conference was set up by law in September 1958; that on July 17, 1959, Governor Blair appointed a state committee; that at first MSMA participation was advisory only but later was made official. He said that there were 95 persons on the committee and that Dr. Hardwicke was Chairman of the group which wrote the report of Task Force No. 4, dealing with Medical Care; also that Dr. Wilson was one of a seven person committee on redrafting of summaries.

It was pointed out that doctors attended all state regional conferences held and that there were many other persons in various lines of endeavor who opposed compulsory programs which had been advocated by some groups at the various conferences.

Dr. Peterson stated that he felt the Association should actively support the medical assistance act, the Mills-Kerr bill, and urge our legislature to implement the program in Missouri.

On motion of Dr. Stuart, duly seconded, the report was accepted.

VENDOR PROGRAM: "CARE OF THE NEEDY"

The present Vendor program in Missouri, as outlined in House Bill 1, as enacted by the legislature in 1959, enabled the state to set up a fund known as a "pooled fund" out of which money may be paid to hospitals or nursing homes. Further, such money may be paid only for the inpatient hospital care of persons requiring hospitalization for medical emergencies or acute serious illness or for nursing home care or at home care for completely bedfast and totally disabled persons.

The legislature in 1959 appropriated $3,000,000 of state funds for the pool and the Federal government matched these funds with about $3,500,000 additional funds. At present the state is paying hospitals on a per diem cost basis less costs for x-ray, pathology, anesthesia and physical therapy which are considered medical services. In addition, not more than $100.00 per month may be paid for home or nursing home care of an individual.

The Mills-Kerr bill expands the program and authorizes the states additional federal funds in the event the states create implementing legislation.

Care of the Near Needy

The Mills-Kerr bill provides a new category of "pooled funds" for a class of persons categorized as medically indigent or "near needy." This group of persons includes those who are able to pay most or all of their regular expenses excepting medical expenses.

After discussion of the present "Vendor" program and the new "Vendor" program, outlined in the Mills-Kerr bill, in which the present stand of the Association regarding payment to physicians was outlined, on motion of Dr. Bull, properly seconded, it was agreed that the Council approve of the principles outlined in the Mills-Kerr bill and that the legislature be urged to implement the program realistically in our state, and that the opinion of the Association be made public.

CANCER TEACHING COURSE

Dr. Wilson announced that beginning January 1, under a combined program of the University of Missouri Medical School and the Ellis Fischel State Cancer Hospital, there would be facilities at the Ellis Fischel State Cancer Hospital for short teaching courses for physicians in the diagnosis of cancer.

HEALTH FAIR

It was suggested that the Association obtain information as to the costs of an exhibit at the Kansas City Health Fair in March. The exhibit would portray the activities of the Association in the Student Loan Fund, AMEF, and the preceptor program.

NEXT MEETING

Because of possible legislative considerations, it was felt that an early Council meeting should be held and January 21 and 22 were selected.

Donald M. Dowell, M.D., *Chairman*

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MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

Fourteenth Annual Convention

Hotel Muehlebach
Kansas City, Missouri

March 19, 20, 21 and 22, 1961

TIME AND PLACE OF MEETINGS

Sunday, March 19, 1961

10:00 a.m. Board of Directors Meeting, St. Joseph Hospital.
1:30 p.m. Registration, Rossiter Hall Auditorium, St. Joseph Hospital.
2:00 p.m. Business Meeting, Missouri Society of Medical Technologists, Rossiter Hall Auditorium, St. Joseph Hospital.
6:30 p.m. Buffet Supper, St. Joseph Hospital.
8:00 p.m. Business Meeting, Missouri Association of Blood Banks, St. Joseph Hospital.

Monday, March 20, 1961

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
9:00 a.m. Scientific Session, Presented by the Missouri Association of Blood Banks, Rooms 471-473.
12:00 noon Lunch.
2:00 p.m. Scientific Session, Rooms 471-473.
3:05 p.m. Coffee Break.
3:25 p.m. Scientific Session, Rooms 471-473.
5:00 p.m. Adjournment.
6:30 p.m. Social Hour, Golden Ox Restaurant.
7:30 p.m. Annual Banquet Sponsored by the Missouri Society of Clinical Pathologists, Golden Ox Restaurant.

Tuesday, March 21, 1961

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
8:55 a.m. Scientific Session, Rooms 471-473.
10:10 a.m. Coffee Break.
12:30 p.m. Lunch.
2:00 p.m. Tour Midwest Research Institute, 425 Volker.
2:00 p.m. Workshop: Radio-Isotopes in the Clinical Laboratory, St. Mary's Hospital, 101 Memorial Drive.

Wednesday, March 22, 1961

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
9:00 a.m. Scientific Session, Rooms 471-473.
10:00 a.m. Coffee Break.
10:15 a.m. Scientific Session, Rooms 471-473.

SCIENTIFIC SESSIONS

Monday, March 20, 1961

MORNING SESSION

Lula Mims, MT(ASCP), St. Louis, Presiding
Ruth Neseth, MT(ASCP), Kansas City, Alternate

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
9:00 a.m. Invocation, Edward L. Weinrich, A.B., M.A., B.D., Minister, University Heights Christian Church, Kansas City.
9:05 a.m. Welcoming Address, Mrs. L'Nora Wells, MT(ASCP), President Missouri Society of Medical Technologists, Columbia.
9:10 a.m. Scientific Session Presented by the Missouri Association of Blood Banks.
Program Chairman: Perry Morgan, Ph.D., Director, Community Blood Bank of the Kansas City Area, Inc., Associate Clinical Professor, Department of Microbiology, University of Kansas Medical School.
Speakers:
Edith Bossom, MT(ASCP), Community Blood Bank of the Kansas City Area, Inc., Kansas City.

Leo Cawley, M.D., Wichita, Kansas
Beverly Fiorella, MT(ASCP), St. Mary's Hospital, Kansas City.
Russell W. Kerr, M.D., Pathologist, St. Joseph Hospital, Kansas City.
Angelo Lapi, M.D., Pathologist, St. Mary's Hospital, Kansas City.
William Pollack, Ortho Research Foundation, Division of Serological Development, Ortho Pharmaceutical Corporation, Raritan, N. J.

Afternoon Session

Marie Anderson, MT(ASCP), Springfield, Presiding
Bernadine Missel, MT(ASCP), St. Louis, Alternate

2:00 p.m. Use of the Alkaline Phosphatase Stain on Peripheral Blood Smears, Marjorie S. Sirridge, M.D., Associate in Medicine, University of Kansas; Chief of Hematology, Providence Hospital; Consultant in Hematology, Wadsworth Veterans Administration Hospital.
2:45 p.m. Film, Bone Marrow Aspiration, Henry Ford Hospital, Detroit, Michigan.
3:05 p.m. Coffee Break.
3:25 p.m. Leukocyte Antigens and Antibodies, Mary E. Heckman, A.B., MT(ASCP), Graduate Student Teaching Assistant, Department of Microbiology, University of Kansas Medical Center.
3:55 p.m. Clinical Hematological Investigation—A Case Presentation, Victor B. Buhler, M.D., Pathologist, St. Joseph Hospital, Kansas City, Missouri.
5:00 p.m. Adjournment.

Annual Banquet, Golden Ox Restaurant, 1600 Genesee St.

6:30 p.m. Social Hour.
7:30 p.m. Banquet sponsored by the Missouri Society of Clinical Pathologists for members of the Missouri Society of Medical Technologists.
Master of Ceremonies: Frederick C. Coller, M.D., Springfield.
Speaker: Jeramiah J. McElligott, Representative of American Telephone and Telegraph.

Tuesday, March 21, 1961

Morning Session

Sr. Robert Margaret, MT(ASCP), Kansas City, Presiding
Audrey Wines, MT(ASCP), St. Louis, Alternate

8:00 a.m. Registration.
8:55 a.m. Academic Training of Medical Technologists, David Paretsky, Ph.D., Professor and Chairman, Department of Bacteriology, University of Kansas.
9:15 a.m. Fluorescent Antibody in the Clinical Laboratory, Cora M. Downs, Ph.D., Professor, Department of Bacteriology, University of Kansas.
9:40 a.m. A Session With the Cestoda, Mary E. Larson, A.M., Assistant Professor of Zoology, University of Kansas.
9:55 a.m. Demonstration, Miss Larson.
10:10 a.m. Coffee Break.
Reports on Three Micro Procedures in the Clinical Laboratory.
10:25 a.m. Plasmacrits, Jeannette S. Carter, Ph.D., MT(ASCP), Director, Bacteriology and Serology Departments, St. Joseph Hospital, Kansas City, Missouri.
10:50 a.m. Micro L. E. Cell Preparations, Mary Margaret Kelly, B.S., MT(ASCP), St. Joseph Hospital, Kansas City, and Mary I. Berkey, B.S., MT(ASCP), St. Joseph Hospital, Kansas City.
11:10 a.m. An Evaluation of the Micro Prothrombin Time, Mary C. Abts, A.B., MT(ASCP), St. Joseph Hospital, Kansas City and Mary L. Burke, A.B., MT(ASCP), Director of Laboratory, Raytown Clinic, Raytown.
11:30 a.m. Forensic Toxicology, John P. Wyatt, M.D., Professor of Pathology, St. Louis University School of Medicine.
12:00 noon Radio-Isotopes in the Clinical Laboratory, L. R. Moriarty, M.D., Pathologist, St. Margaret's Hospital, Kansas City, Kansas; Irwin Joffe, M.D., Associate Pathologist, St. Mary's Hospital,

Kansas City; Marian Winter, B.S., MT(ASCP), St. Mary's Hospital, Kansas City.

12:30 p.m. Lunch.

Afternoon Session

2:00 p.m. Workshop, Limit 16, Enrollment by Reservation Only.
Radio-Isotopes in the Clinical Laboratory: Demonstration of the Triiodothyronine Technic, L. R. Moriarty, M.D., Pathologist, St. Margaret's Hospital, Kansas City, Kansas; Irwin Joffe, M.D., Associate Pathologist, St. Mary's Hospital, Kansas City; Marian Winter, B.S., MT(ASCP), St. Mary's Hospital, Kansas City.
The workshop will be held at St. Mary's Hospital, 101 Memorial Drive.

2:00 p.m. Tour, Reservation Only.
Midwest Research Institute, 425 Volker.

Wednesday, March 22, 1961

Morning Session

Frances Fitzgerald, MT(ASCP), Kansas City, Presiding
Erline Spickard, MT(ASCP), Springfield, Alternate

8:00 a.m. Registration.

9:00 a.m. Experiences With a Three Day Adrenal Gland Function Test, J. H. Hill, M.D., Pathologist, Trinity Lutheran Hospital, Kansas City.

9:30 a.m. Renal Function, C. Thorpe Ray, M.D., Professor and Chairman, Department of Medicine, University of Missouri School of Medicine.

10:00 a.m. Coffee Break.

10:15 a.m. An Improved Method for the Determination of Uric Acid in the Blood, Marie H. Carr, M.A., MT(ASCP), Biochemist in Research, Veterans Administration Hospital, Kansas City.

10:45 a.m. An Evaluation of Methods to Determine Blood Urea Nitrogen, Russell J. Eilers, A.B., B.S., M.B., M.D., Assistant Professor of Pathology and Director of Clinical Laboratories, University of Kansas Medical Center.

11:30 a.m. The Serum Creatinine and Creatinine Clearance Test as Measures of Renal Function, Perry W. Nadig, M.D., Resident in Urology, University of Kansas Medical Center.

12:00 noon Panel: Question and Answer Session.
Moderator: Harold J. Grady, Ph.D., Associate Professor of Biochemistry, University of Kansas Medical Center.
Panelists:
J. H. Hill, M.D., Kansas City.
C. Thorpe Ray, M.D., Columbia.
Marie H. Carr, MT(ASCP), Kansas City.
Russell J. Eilers, M.D., Kansas City, Kansas.
Perry W. Nadig, M.D., Kansas City, Kansas.

12:30 p.m. Adjournment.

Deadline for Reservations, March 12, 1961. Make Reservations to: Miss Rachael Creager, Laboratory, General Hospital, Kansas City 8, Missouri.

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*Council on Drugs, J.A.M.A. 165:58 (Sept. 7) 1957.

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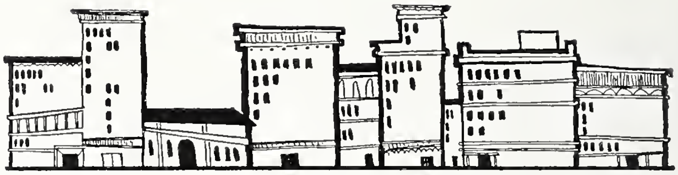

UNIVERSITY OF MISSOURI

Meetings at Medical Center

The nutrition of the individual human being as he develops through life will be discussed by six specialists at the Ontogentic Nutrition Symposium to be held April 5, 1961, in the auditorium of the University of Missouri School of Medicine.

The symposium, open to the public, is sponsored by the National Vitamin Foundation in cooperation with the University of Missouri School of Medicine. It will begin at 1:30 p.m. April 5.

Dr. Vernon E. Wilson, Dean and Director of the Medical Center will welcome the delegates. Dr. Thomas D. Luckey, professor of biochemistry and chairman of the department at the University of Missouri School of Medicine, will introduce the speakers who will include: Robert M. Nitowsky, M.D., The Johns Hopkins School of Medicine, Baltimore, Md.; Robert L. Jackson, M.D., professor of pediatrics and chairman of the department, University of Missouri School of Medicine; David B. Coursin, M.D., St. Joseph Hospital, Lancaster, Pa.; and Herbert Pollack, M.D., assistant professor of clinical medicine, Postgraduate Medical School, New York University. Robert S. Goodheart, M.D., scientific director of the National Vitamin Foundation, will lead the panel discussion at 9:20 p.m. Dr. Hillman will speak at 1:40 p.m. on "Fetal Nutrition"; Dr. Nitowsky will speak at 2:30 p.m. on "Infant Nutrition: Premature and Normal Born"; Dr. Jackson will discuss "Child Nutrition" at 3:20 p.m.; Dr. Coursin will speak on "Nutrition in Adolescence" at 4:05 p.m.; and Dr. Pollack will speak on "Adult Nutrition" at 7:45 p.m. Dr. Hillman will speak again at 8:30 p.m. on "Geriatric Nutrition."

The first of a series of semi-annual Postgraduate Seminars in Urology at the University of Missouri was held at the Medical Center, December 10. Sessions were held in the Medical Center auditorium, starting at 9:15 a.m. About 200 medical men from throughout the State of Missouri attended. The seminar was presented by the Division of Urology of the School of Medicine. Ian M. Thompson, M.D., chairman of the Division of Urology, said the seminar was designed to bring to the physicians of Missouri the latest concepts in the treatment of urological diseases, and to provide a showcase of what is being done in urology at the University School of Medicine. He said it was planned to have such seminars hereafter each spring, and each December.

Three outstanding specialists in the field of urology were the guest speakers; R. H. Flocks, M.D., professor and chairman of the Department of Urology at the University of Iowa School of Medicine, Iowa City, and an internationally-known urologist; T. E. Nesbitt, M.D., of the Section of Urology, Vanderbilt School of Medicine, Nashville, Tenn.; and G. Prout, M.D., chairman of the Division of Urology, Medical College of Virginia, Richmond.

Dr. Nesbitt discussed "Diseases of the Scrotal Contents," Dr. Flocks spoke on "What's New in Urology" and Dr. Prout discussed "Carcinoma of the Prostate." Other speakers from the University of Missouri and their subjects were Herbert L. Warres, M.D., St. Joseph, a clinical instructor in surgery (urology), on "Interstitial Cystitis"; John T. Lowney, M.D., assistant professor of medicine, on "Chemotherapy in Genitourinary Neoplasms"; Dr. Thompson on "Surgery for Testicular Tumor"; Earl J. Wipfler, M.D., assistant instructor in surgery, on "Intravenous Aortography"; and Dr. Gilbert Ross, assistant instructor in surgery (urology) on "Cine Radiography of the Urinary Tract."

A panel discussion on "The Metabolic Background for Urinary Tract Stone Disease" and talks on new developments in urology by members of the School of Medicine staff were also on the seminar program. Moderators were Dr. Thompson and Thomas W. Burns, M.D., associate professor of medicine.

Dean Wilson welcomed the participants in the seminar. James Cope, M.D., Columbia, a clinical assistant professor of surgery (urology), presided at a urological x-ray and case presentation conference that closed the seminar.

Gifts and Grants

The Women's Auxiliary of the Saline County Medical Society has contributed $340 to the University of Missouri to add to the revolving student loan fund at the School of Medicine it was announced by Dean Vernon E. Wilson. The donation is to be used especially for loans to students in the School of Nursing or in medical technology.

Dr. Jerry W. Brown, associate professor of

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anatomy, has received a grant of $2,200 for the purchase of a Zeiss operating microscope to be used in investigation of the nerve supply of blood vessels, from the University of Missouri Research Council.

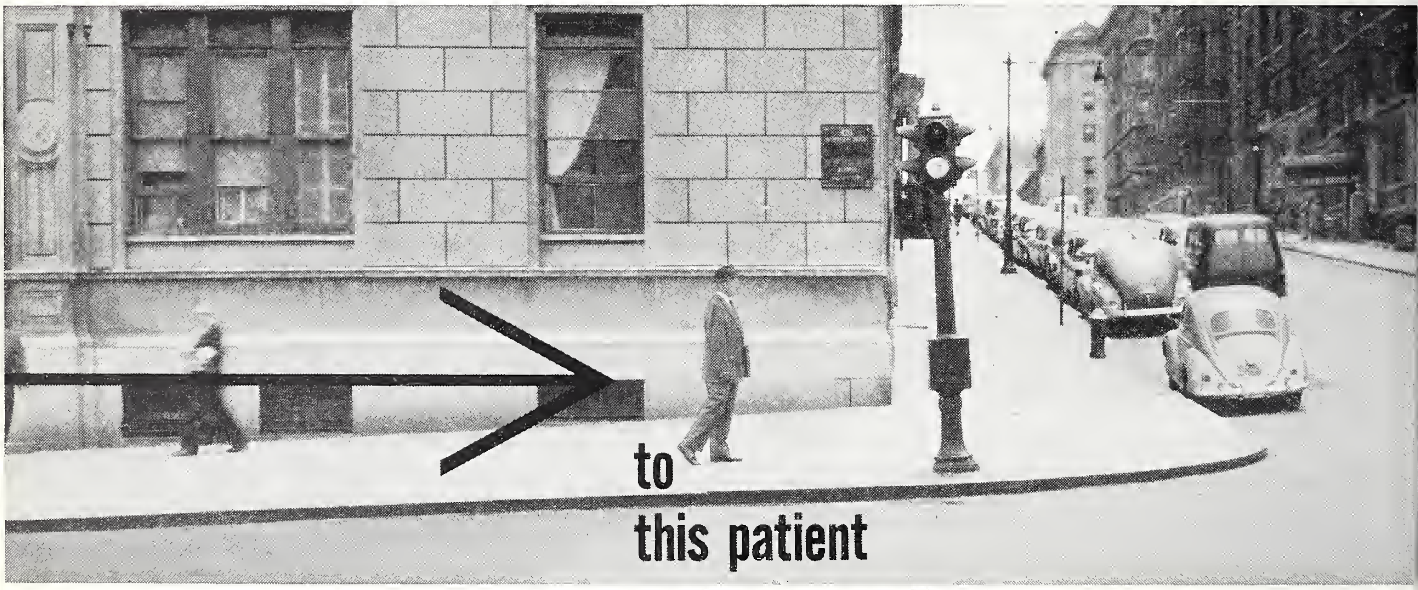
Appointments and Elections

Dr. Vernon E. Wilson, Dean and Director of the Medical Center, has been appointed a member of the Public and Professional Relations Committee of the Missouri Academy of General Practice. He is one of nine members of the committee from various parts of Missouri appointed by Cecil G. Leitch, M.D., Kansas City, new president of the Missouri Academy of General Practice.

Three members of the department of microbiology were elected to offices at the meeting of the Eastern Missouri Branch of the Society of American Bacteriologists held in St. Louis, December 3, 1960. Dr. F. B. Engley, Jr., chairman of the department, was elected National Councilor, a representative of the local to the national society, for a two year term. Drs. H. S. Goldberg and James T. Barrett, both associate professors, were elected to the offices of Secretary-Treasurer and Vice President, each for a one year term. Each of these three university professors was also coauthor of a scientific paper presented at the meeting. Dr. Engley was coauthor of a paper entitled "Staphylococcal Hemolysins" with Raymond F. Gray, a former graduate student in the department of microbiology. Dr. Goldberg presented a paper entitled "Survival of Leptospira in Body Tissues and Fluids." His coauthors were Dr. D. C. Blenden of the School of Veterinary Medicine and Dr. A. Mishra, now in India and formerly a student in the Veterinary School. Charles W. Cheek, fourth year medical student was coauthor with Dr. Barrett and presented a paper on "Immunologic Studies on Geotrichum Candidum."

Trips and Talks

Dr. Vernon E. Wilson, Dean and Director of the Medical Center, presented "The Future of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Your Medical School," at a meeting of the Greene County Medical Society in Springfield, Missouri, November 18, 1960. Dr. Wilson also spoke to the Pre-Medical Club of the University of Missouri School of Medicine in the A. P. Green Chapel basement on December 7. His talk was "Your Career in Medicine."

Dr. M. D. Overholser, professor of anatomy and chairman of the department, attended the annual meeting of the Midwest Regional Anatomists at the Indiana University Medical Center in Indianapolis, where he presented research papers on anatomic subjects and on the teaching of anatomy. Dr. Overholser attended the annual meeting December 10, 1960, and he also visited the department of anatomy of the University of Indiana School of Medicine while in Indianapolis.

Dr. Jerry W. Brown, associate professor of anatomy, attended the meeting of the Association for Research in Nervous and Mental Diseases in New York City, December 9 and 10, 1960. "Ultrastructure and Metabolism of the Nervous System" was the topic for discussion. Dr. Brown also visited the department of anatomy at the University of Pittsburgh, December 11 to 13, to confer with Dr. Tryphena Humphrey, professor of anatomy, on research matters of mutual interest.

Dr. Herbert E. Brown, assistant professor of anatomy, attended the third annual meeting of the American Society of Hematology November 28 to 30, in Montreal, Canada.

Dr. Thomas D. Luckey, professor and chairman of the department of biochemistry, discussed and showed a movie titled "Germfree Animals in Medical Research" to about 45 medical students and faculty members on December 5 and again on December 8 to about 20 other people affiliated with the School of Medicine. The 20 minute sound-color film was made at the National Institutes of Health and distributed by the Communicable Disease Center.

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biochemistry, presented a paper entitled "Studies on Bone Formation in Organ Culture," at a meeting of the Eastern Missouri Branch of the Society of American Bacteriologists, December 3, 1960.

Dr. Frank B. Engley, Jr., professor and chairman of the department of microbiology, attended the Symposium on Defense Against Biological and Chemical Warfare, sponsored by the group on Medical Education for National Defense, in Washington, D. C., from December 7 to 10, 1960. The topic of discussion was defense against biological and chemical warfare. In the two and one half days, the representatives from medical schools were brought up-to-date on the subject by representatives from the military service.

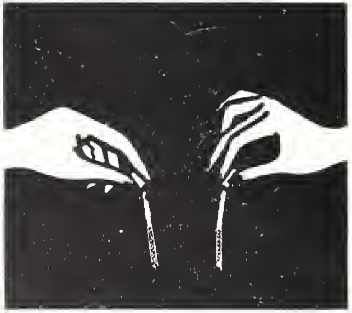
Dr. Herbert S. Goldberg, associate professor of microbiology, was guest speaker at the meeting of Sigma Delta Epsilon, honorary scientific women's society, on the University of Missouri campus December 12, 1960. He discussed antibiotics and their non-medical uses.

Dr. Robert L. Jackson, professor and chairman of the department of pediatrics, presented a paper entitled "Principles—Foods or Supplements," at a Symposium on Clinical Nutrition at the meeting of the American Medical Association in Washington, D. C., from November 30 to December 2. In addition to the symposium there was also a meeting of the Food and Nutrition Council of the AMA. Dr. Jackson, as chairman, presided over the committee meeting on Teaching Nutrition in medical schools. In addition to the members of the Food and Nutrition Council, a consultant to represent preclinical and clinical departments of medical schools was invited to attend the meeting and briefly discuss the teaching of nutrition as related to their department.

Dr. Clement E. Brooke, associate professor of periatrics, attended an intensive refresher course on biological and chemical warfare, particularly as it relates to civilians in time of disaster, at the MEND meeting in Washington, D. C., from December 7 to 9.

Dr. Fikri M. Hanna, assistant professor of pediatrics, discussed "Convulsive Disorders in Children" and also gave brief comments regarding management of the allergic child at a meeting of the Lee County Medical Society in Keokuk, Iowa, December 14.

Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department, was a member of the visiting faculty of the Southwest Regional Conference on Personnel Management for Executives, held at Fort



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Bliss, Texas, from December 7 to 16. Attendance at the conference was limited to top-ranking career officers service. Dr. Weiss spoke to the group on Monday, December 12 on "Mental Health Problems of the Executive." Dr. Weiss also attended a meeting of the advisory council of the Research Unit of the Washington University School of Nursing in St. Louis, on December 1. Dr. Weiss is consultant in psychiatry to this unit, which is presently engaged in a five-year study (now in the third year). This study, entitled "Personalization of Older Patients," is concerned with the socializing effect of introducing trained nurses into a situation where they may interact and communicate on a planned basis with older patients suffering from chronic disorders of all types.

Dr. David Davis, assistant professor of psychiatry, spoke to laymen, sheriffs and police of Missouri at a meeting of Missouri Law Enforcement Officers on "How to Deal With the Mentally Disturbed Patient," December 6, 1960. This was part of the "Law Enforcement Short-Course on Jail Security"; a film "Safe Keeping" was shown following the talk, about which Dr. Davis led a discussion and question-answer period dealing with the handling of mentally disturbed people by the police.

Dr. Hugh E. Stephenson, Jr., professor of surgery, participated in a panel discussion of "Closed Chest Resuscitation," at the A.S.A. 14th Annual Meeting of the Postgraduate Assembly held in New York City December 6 to 11.

Dr. Carl H. Almond, assistant professor of surgery, and Dr. Victor Carnes, clinical cancer trainee, were guest speakers when the Chariton-Macon-Monroe-Randolph County Medical Society held its monthly dinner meeting at Woodland Hospital in Moberly. They presented a Clinical Pathological Conference on December 9, the topic of discussion being hypoglycemia associated with fibrosarcoma.

Dr. S. P. W. Black, professor of surgery, attended the Association for Research in Nervous and Mental Diseases, meeting in New York City, December 9 and 10.

ST. LOUIS UNIVERSITY

Grant Awards

The Department of Pharmacology has been awarded a grant of $49,500 by the National Science Foundation for a research project entitled "Metabolism of Ribonucleic Acid in Bacterial Extracts." The award was made to Dr. Audrey L. Stevens, instructor in pharmacology, who is

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studying the synthesis of ribonucleic acids and other aspects of metabolism in bacterial extracts.

Dr. Stevens joined the medical faculty at St. Louis University this Fall. She received her bachelor of science degree from State University of Iowa and her doctor of philosophy degree from Western Reserve University.

She came to the School of Medicine from the National Institutes of Health in Bethesda, Maryland, where she was a post-doctoral fellow in biochemistry.

The Department of Biochemistry has been awarded a $5,400 grant renewal by the Nutritional Foundation for continued studies on the nutritional influence upon bile. Total allotments from the Foundation over a five-year period total $26,600.

The award was made to Dr. Edward A. Doisy, Jr., professor of biochemistry. Under the grant, he and his research associates are studying the influence of dietary components on liver function.

By analyzing bile collections from animals placed on diets similar to those causing deficiency disease in the human being, they are seeking a better understanding of the human's specific need for vitamins to supplement body deficiencies. Their findings may also add to the knowledge of human liver diseases.

Appointment

Francis B. O'Leary has been appointed instructor and librarian at the St. Louis University School of Medicine. Mr. O'Leary, who is 34 years of age, comes to the University from the University of Minnesota, where he was Engineering Librarian from 1957 to 1960. Before that time, he was associated with the Medical and Natural Sciences Libraries at Columbia University from 1945 to 1957.

He was awarded his bachelor of science degree by Manhattan College in 1949 and his master of science degree in library service by Columbia University in 1952.

A specialist in scientific literature, he has written numerous articles and book reviews for various professional journals and prepared the index for the Geological Symposium entitled "Crust of the Earth" published by the Geological Society of America.

He is a member of the Special Libraries Association, Medical Library Association, American Documentation Institute, History of Science Society, United States Naval Institute and American Association for the Advancement of Science.

Invention

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cians in the diagnosis and prevention of coronary attacks, has been released on the commercial market.

The inventor is Dr. Alfred W. Richardson, professor of physiology. His associate on the project was a former colleague, Dr. Jack G. Bishop, now director of the department of physiology at Baylor University College of Medicine, Dallas, Texas.

The recorder is an advanced modification of a blood coagulation meter which was developed by Drs. Richardson and Bishop several years ago, after five years of research study on blood problems. The scientists demonstrated the original meter and reported their findings before the Forty-First Annual Meeting of the Federation of American Societies for Experimental Biology. As they made further developments on the instrument, they published six scientific papers.

A new concept of recording, the lightweight portable model (commercially known as the Emdeco Prothrombin Recorder) is about the size of a portable typewriter. It employs simple decision elements comparable to those used in an "electric brain." The recorder is a new method of measuring blood components; its main function being to take the human error out of the measurement of a patient's blood clotting activity.

The electronically controlled device operates quickly and simply. A blood sample and a reagent (substance employed to produce a chemical reaction) are placed in two chambers of the unit. A rocking mechanism mixes the two liquids. An automatic recording and timing device complete the test within a matter of seconds.

The recorder provides three new aids:

(1) It will determine blood Prothrombin time. The test will be of value to the person who has had a first coronary, for it will aid in the prevention of a second one. The measurement is also valuable in the diagnosis of blood clotting diseases and cardiac catheterization procedure.

(2) It will determine how much prothrombin there is in the blood. By measuring prothrombin content of the blood, the recorder can be used in the diagnosis of special diseases of blood clotting.

(3) It will determine the amount of formed fibrin (white, insoluble protein, which is an essential protein of the blood clot formed by the blood).

Until recently, the recorder, useful in both research and clinical laboratories, existed only at the St. Louis University and Baylor University Schools of Medicine. The recorder is now available as a standard piece of diagnostic equipment for the practicing physician without the requirement of a highly skilled technical specialist.

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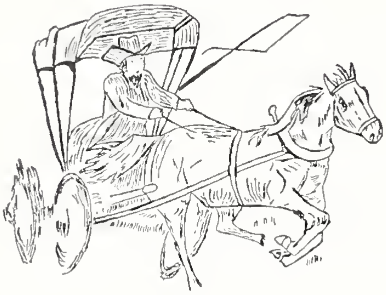

FORTY YEARS AGO

St. Louis had barely recovered from the boomerang reception accorded a certain Dr. Cook who, in terms of the polariscope, was found to be levorotatory, when along comes a self-styled "Dr." O. E. Miller, imbued with the firm conviction that if St. Louisans "fell" once they could by logical ratio be counted upon to do so again. It seems that the Chamber of Commerce committee "slipped" for awhile but eventually regained their balance thanks to the vigilance of the American Medical Association whose book *Nostrums and Quackery* exposed Miller's hectic career in pseudo-medical ventures here and abroad.

Dr. George H. Jones, for the past four years secretary of the state board of health, has resigned and will sever his connections with the state health activities after February 1. He has been identified with the state health department for eight years, serving as state bacteriologist for four years previous to his appointment as secretary in 1917, when the laboratory and bacteriological work was transferred to the state university. On November 20, 1919, he was appointed state health commissioner.

The Western Surgical Association meeting in southern California on December 3 and 4, 1920, elected three new members from Missouri, Dr. Hyland Wallace, St. Joseph, Dr. Harvey McKay and Dr. Evarts Graham, St. Louis. The new officers elected for the ensuing year included Dr. Herman E. Pearse, Kansas City, first vice president; Dr. William T. Coughlin and Dr. Ronald Hill, St. Louis, members of the executive committee. It was decided to hold the 1921 meeting in St. Louis and Dr. William F. Leighton, St. Louis, was appointed chairman of the committee on arrangements.

Dr. Wm. H. Mook, of St. Louis was severely injured January 1 when his machine collided with another machine that carried no lights.

TWENTY-FIVE YEARS AGO

Dr. Arthur J. Cramp, founder and for twenty-nine years active head of the American Medical Association's Bureau of Investigation, resigned recently because of ill health. Dr. Cramp had been with the American Medical Association since 1906. Probably every major medical quack who has been exposed in the last fifteen or twenty years owes his exposure to Dr. Cramp.

The Kansas City Pathological Society held its annual meeting December 3 and Dr. Frank J. Hall, Kansas City, was elected president, and Dr. R. W. Kerr, Kansas City, secretary-treasurer.

The Patriarchal Interns of the St. Louis City Hospital held a reunion on November 18, 1935, at the City Hospital. The "Patriarchal Interns" are those physicians who served as interns in the St. Louis City Hospital thirty years or more previous to November, 1935.

TEN YEARS AGO

Leo Loeb, M.D., St. Louis, professor emeritus of pathology at Washington University School of Medicine, was honored by the dedication to him of the December issue of *Archives of Pathology*.

The Jefferson County Medical Society held a meeting in the office of Karl V. McKinstry, M.D., DeSoto, on December 1. The meeting was called to order at 8:00 p.m., by the president, R. H. Donnell, M.D., Crystal City. The following officers were elected: President, Thomas A. Donnell, M.D., DeSoto; vice president, Vernon E. Sehulein, M.D., Crystal City; secretary-treasurer, John F. Rutledge, M.D., Crystal City.

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NEW MEMBERS

Theodore Cooper, M.D., 934 Coffey Drive, St. Louis, has become a member of the St. Louis Medical Society. Dr. Cooper is a native of New Jersey, received his preliminary education in Maryland, and his M.D. degree from St. Louis University School of Medicine in 1954.

William F. Dryer, M.D., 118 W. Pine St., Houston, has become a member of South Central County Medical Society. Dr. Dryer is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1937.

Paul H. Grubb, M.D., 2509 Jackson Ave., Joplin, has become a member of Jasper County Medical Society. Dr. Grubb is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas in 1945.

Richard J. Kemme, M.D., 1304 South 14th St., St. Louis, has become a member of the St. Louis Medical Society. Dr. Kemme is a native of Colorado, received his preliminary education in Colorado, and his M.D. degree from St. Louis University in 1956.

Charles A. Kendall, M.D., 10901 Winner Rd., Independence, has become a member of the Jackson County Medical Society. Dr. Kendall is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas in 1956.

Angelo Milano, M.D., 3665 Rutger St., St. Louis, has become a member of the St. Louis Medical Society. Dr. Milano is a native of Italy, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine in 1955.

James G. Shea, M.D., Gerald Medical Center, Gerald, has become a member of the Franklin-Gasconade-Warren County Medical Society. Dr. Shea is a native of Connecticut, received his preliminary education in Vermont and his M.D. degree from Georgetown University in 1952.

Irvin C. Susman, 216 S. Kingshighway Blvd., St. Louis, has become a member of the St. Louis County Medical Society. Dr. Susman is a native of Missouri, received his preliminary education in Wisconsin, and his M.D. degree from the University of Illinois in 1949.

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Sanborn Company, Waltham, Mass. Booth 6.

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Demonstrations and/or data will also be available on Sanborn instruments for biophysical research—single and multi-channel recording systems, monitoring oscilloscopes and physiologic transducers.

Qualified Sanborn representatives will be pleased to answer questions and assist you with technical problems.

The Medical Protective Company, Fort Wayne, Ind. Booth 7.

As the No. 1 Malpractice Insurer, The Medical Protective Company offers unexcelled coverage. With exceptional proficiency in defense, so essential to the Doctor's protection today, its experience in successfully handling 81,000 claims and suits during sixty-two years of Professional Protection Exclusively is unparalleled in the professional liability field.

Wm. P. Poythress & Co., Inc., Richmond, Va. Booth 8.

Erl Lusk extends a cordial welcome from the Poythress exhibit booth, No. 8. Synirin, effective new analgesic; Mudrane, outstanding antiasthmatic; and Solfoserpine, effectively balanced hypotensive-sedative, are featured as well as the traditional Poythress products Solfoton, Panalgesic, and Trocinate. Your requests for professional trial quantities and descriptive literature are sincerely invited.

Wm. S. Merrell Company, Cincinnati, Ohio. Booth 9.

A summary of mounting clinical evidence attesting to the effectiveness of MER/29 in patients with hypercholesterolemia and related conditions is presented by MERRELL. Update your knowledge of MER/29 by stopping briefly at the MERRELL display. Salesmen will summarize the extensive results of MER/29 therapy for you and answer questions you may have.

Columbus Pharmacal Company, Columbus, Ohio. Booth 10.

Missouri Pepsi-Cola Bottlers, Kansas City, Mo. Booth 12.

E. R. Squibb & Sons, New York, N. Y. Booth 14.

Dumas-Wilson & Company, St. Louis, Mo. Booth 15.

Dumas-Wilson & Company extends a cordial invitation to the physicians attending this annual session to visit our booth featuring several new specialty items of interest to the specialist as well as the general practitioner.

The Coca-Cola Company, Atlanta, Ga. Booth 17.

Ice-cold Coca-Cola served through the courtesy and cooperation of the Kansas City Coca-Cola Bottling Co., and The Coca-Cola Company.

Missouri Medical Service (Blue Shield), St. Louis. Booth 18.

Professional Relations representatives of the St. Louis Blue Shield Plan are available at Booth 18 to provide full information about the new Blue Shield-Blue Cross "Blue Major" program—The St. Louis Plans' *major medical* protection. They will also be happy to answer your questions about the new Federal Employees Health Benefits program or any of the other current St. Louis Blue Shield plans.

Sandoz Pharmaceuticals, Hanover, N. J. Booth 19.

Westwood Pharmaceuticals, Buffalo, N. Y. Booth 20.

Westwood invites physicians to stop by their booth to discuss their unique dermatological products: Fostex Cream, Fostex Cake, Lowila Cake, Lowila Emollient, Sebulex, Fostril, and Alpha-Keri.

These products are particularly suitable for personal use by physicians and their families who may be plagued with dandruff, acne, dry and itchy skin, and sensitivities to soap. Register, so that we may send prescription units to your home.

King Merritt & Company, Jefferson City, Mo. Booth 21.

King Merritt & Company is one of the largest brokerage companies in America specializing in Mutual Funds. By handling more than 100 Mutual Funds, they are in a position to recommend the Fund that best suits the client's needs; whether it is for Income, Growth, or a lump sum Investment, or a Monthly program.

Abbott Laboratories, North Chicago, Ill. Booth 22.

Abbott Laboratories invites you to visit our exhibit. Our representatives will be happy to answer any questions you may have concerning our leading products and new developments.

Mead Johnson & Company, Evansville, Ind. Booth 23.

The Mead Johnson exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives are on duty to tell you about their products.

Roche Laboratories, Nutley, N. Y. Booth 24.

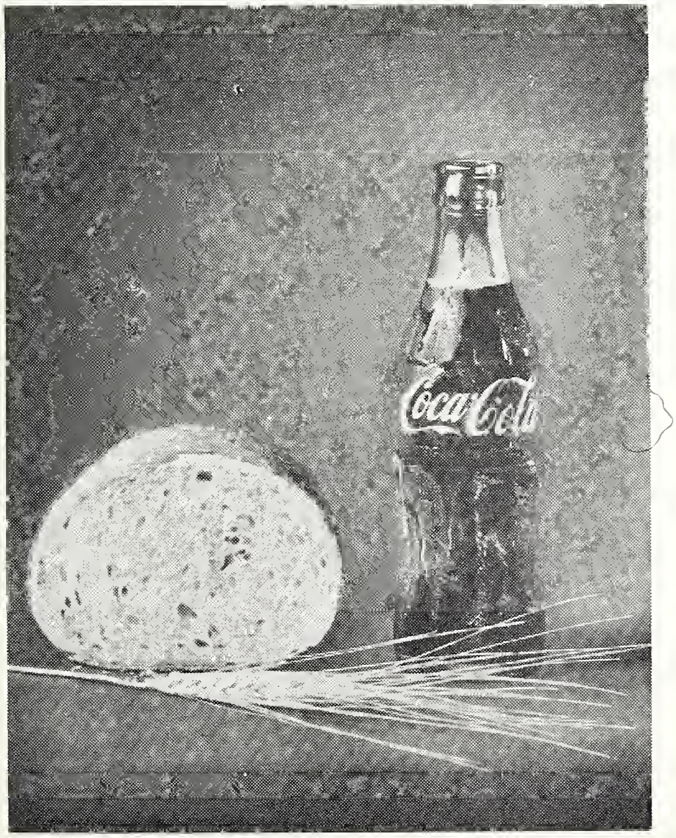
Librium—a therapeutic agent for superior, safer, faster control of nervousness, anxiety, tension and other common emotional disturbances without the dulling effect or depressant action of the tranquilizers.

Madribon—is a completely different, low-dosage sulfonamide of particular value in the treatment of bacterial infections especially respiratory infections.

Tigan—a specific antiemetic agent effective both prophylactically and therapeutically against most clinically significant types of nausea and vomiting.

The Stuart Company, Pasadena, Calif. Booth 25.

A cordial invitation is extended to all members and guests attending this meeting to visit the Stuart Company booth. Specially trained representatives are in attendance to answer your questions on new products developed in our new and modern laboratories which have received international acclaim.



Coca-Cola, too, has its place in a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy.. brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

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WALLACE LABORATORIES, CRANBURY, N. Y. BOOTH 26.

Wallace Laboratories presents a new non-hormonal agent, SOMA, to relieve pain, stiffness and spasm in muscle and joint complaints. SOMA has been highly effective in many musculoskeletal disorders including arthritis, fibrositis, myositis, spondylitis, backache, sprains, contusions and whiplash injuries. SOMA relieves pain and stiffness promptly. No side effects other than sleepiness have been observed.

MISEMER PHARMACEUTICAL, INCORPORATED, SPRINGFIELD, MO. BOOTH 27.

It is the pleasure of Misemer Pharmaceuticals to introduce at the Missouri State Medical Association meeting two new products in our ever growing product line.

Vi Tot: A complete line of children's vitamins (including Feobee, a general purpose hematinic).

Uninatal NaF: Due to ever increasing requests we will introduce our new prenatal vitamin and mineral formula built around NaF.

WILLIAM H. RORER, INC., PHILADELPHIA, PENNA. BOOTH 28.

Maalox, a pleasant tasting, non-constipating antacid, is featured in Liquid, Tablets and Maalox No. 2 (double strength) Tablets. Other products highlighted are Ascriptin, a professional salicylate for pain of arthritis, Fermalox, a non-irritating, uncoated, buffered ferrous sulfate tablet, and Parepectolin, a pleasant tasting antidiarrheal preparation of Paregoric, Pectin and Kaolin. Representatives will gladly answer questions concerning Rorer products.

DESITIN CHEMICAL COMPANY, PROVIDENCE, R. I. BOOTH 29.

Desitin Ointment: For treatment of burns, ulcers, diaper rash, abrasions.

Desitin Powder: Relieves chafing, sunburn, diaper rash.

Desitin Suppositories and Rectal Ointment: Relieve pain and itching in uncomplicated hemorrhoids, fissures.

Desitin Baby Lotion: Protective antiseptic.

Desitin Acne Cream: A non-staining, flesh-tinted "Medicream" for the treatment of acne Vulgaris.

Desitin Cosmetic and Nursery Soap: Supermild.

Desitin Suppositories with Hydrocortisone: Prompt response to inflammatory conditions in proctitis, severe pruritis, edema.

CIBA PHARMACEUTICAL PRODUCTS, INC., SUMMIT, N. Y. BOOTH 32.

Forhistal® is a new, low-dosage antiallergic and antipruritic agent. Clinically, Forhistal has proved highly effective in a wide range of allergic and pruritic disorders. It is well tolerated by patients of all ages. Forhistal is available in four forms of issue: Lontabs, Tablets, Syrup and Pediatric Drops.

GEORGE A. BREON & COMPANY, NEW YORK, N. Y. BOOTH 33.

Breon is pleased to present Bronkephrine, Bronkotabs and Bronkotab Elixir for the prophylactic and therapeutic management of bronchial asthma.

Also presented are the Diaparene preparations for the prevention and treatment of ammonia dermatitis; the Lanteen products for more reliable family planning and the Caroid preparations of American Ferment—Caroid and Bile Salts Tablets and Al-caroid Antacid.

THE UPJOHN COMPANY, KALAMAZOO, MICH. BOOTH 34.

Professional representatives of The Upjohn Company are eager to contribute to the success of your meeting. We are here to discuss with you products of Upjohn research that are designed to assist you in the practice of your profession. We solicit your inquiries and comments.

S. J. TUTAG & COMPANY, DETROIT, MICH. BOOTH 35.

S. J. Tutag & Company introduces a new antiobesity agent for prompt and emphatic hunger control—with little if any central nervous system stimulation.

Cydril is a new chemical compound that possesses anoretic action with low toxicity. Cydril is available in two forms, tablets and the sustained-release Tutag Granucap.

Adults and children over 12 years, one Cydril tablet three times daily, preferably ½ hour before meals, or one Cydril Granucap in the morning.

E. FOUGERA COMPANY, INC., HICKSVILLE, N. Y. BOOTH 36.

The exhibit of E. Fougera & Company features products of interest to all physicians. Specialty items for application in Cardiology, Internal Medicine, Radiology, Dermatology and other fields will be shown. Clinical literature, product information, clinical material, and office aids will be available from the informed attendant. All physicians are cordially invited to visit the booth.

ELI LILLY & COMPANY, INDIANAPOLIS, IND. BOOTH 37.

You are cordially invited to visit the Lilly exhibit located in space No. 37. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

GEIGY PHARMACEUTICALS, YONKERS, N. Y. BOOTH 38.

Geigy cordially invites Members and Guests of the Association to its display booth. The newest technics relating to bowel hygiene in addition to more recent developments in therapy of cardiovascular, metabolic and psychiatric disorders may be discussed with physicians and representatives in attendance.

PFIZER LABORATORIES, BROOKLYN, N. Y. BOOTH 39.

You are cordially invited to visit the Pfizer Laboratories' booth where our Professional Service Representatives will be pleased to discuss the latest topics of clinical interest.

A plan that takes the struggle out of saving

Setting aside part of your money for savings isn't easy these days. But there's one sure way: save some of it *before you get it.* You simply ask the company where you work to set aside any amount you wish every payday for U.S. Savings Bonds. The Payroll Savings Plan makes sure it goes into savings before you can dribble it away. And after you're in the plan for a while, you don't even miss the amount that's been put away for you.

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NOW every Savings Bond you own—old or new—earns ½% more than ever before.

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Doho Chemical, New York, N. Y. Booth 40.

Doho Chemical Corporation is pleased to exhibit:
Auralgan: Ear medication for relief of pain in otitis media, also removal of cerumen.
Rhinalgan: Nasal decongestant free from systemic or circulatory effect. Safe for infants, aged.
Otosmosan: Nontoxic fungicide-bactericide (gram-negative, gram-positive) for suppurative and aural dermatomycotic ears.
Larylgan: Soothing throat spray and gargle for infections and noninfectious sore throat involvements.
Biotosmosan HC: The solution to the "problem ear." Antimicrobial, anti-inflammatory, de-inflammatory, anti-allergic, antipruritic.

The Purdue Frederick Company, New York, N. Y. Booth 41.

Cardioquin Tablets: Cardioquin Tablets consist of a new polygalacturonate salt of quinidine and are indicated for cardiac arrhythmias. They minimize the gastrointestinal irritation produced by conventional quinidine salts by dissociating slowly and avoiding the high concentration of quinidine ions responsible for this irritation, yet producing the full therapeutic effects of quinidine required for rapid induction and maintenance.
Senokot: Constipation corrective. Concentrated total senna glycosides which activate Auerbach's plexus, initiate normal neuroperistalsis.

The Dietene Company, Minneapolis, Minn. Booth 42.

Have you tasted Meritene? Meritene is the good-tasting Protein-vitamin-mineral Food Supplement prescribed to provide concentrated nutrition for patients with poor appetite or tolerance for ordinary food. Visit our booth and let us serve you a cool, refreshing Meritene Nourishment.
While there, review also our Dietene Reducing Plan, designed to get better cooperation from overweight patients. The Dietene Plan provides optimum nutrition and maximum satiety without the use of drugs.
Meritene and Dietene are advertised only to the Medical Profession.

Flint, Eaton & Company, Decatur, Ill. Booth 43.

Contour Arch, Inc., Chillicothe, Mo. Booth 46.

Contour Cushion Arches, the soft answer to walking comfort. Resilient unicellular sponge with nontoxic, washable vinyl tops. You walk relaxed on Contour Cushion Arches, and enjoy walking as you should.
The softness of Contour Arches gives cushioning for persons having arthritis or for postoperative wear—making the step more comfortable.

G. D. Searle & Company, Chicago, Ill. Booth 47.

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.
Featured will be our new Aldosterone-Blocking Agent for edema or ascites, Aldactone.

Merck Sharp & Dohme, West Point, Penna. Booth 49.

Diuril and Hydrodiuril, orally effective, non-mercurial diuretic-antihypertensive agents are featured at the Merck Sharp & Dohme booth. More clinical evidence exists for those potent agents than for all other diuretic-antihypertensives combined.
Lyovac Thrombolysin fibrinolysin (human) for use to promote the dissolution of certain intravascular thrombi is also of interest.
Technically trained personnel are present to discuss these and other subjects of clinical interest.

Vitamin Products Company, Milwaukee, Wisc. Booth 51.

W. B. Saunders Company, Philadelphia 5, Penna. Booth 52.

New Saunders titles of special clinical appeal, published since last year's meeting, include: Williamson: Office Diagnosis; Beckman: Pharmacology; Meares: Hypnosis, Current Therapy 1961; Edwards: An Atlas of Heart Diseases; and Rushmer: Cardiovascular Dynamics.

A. S. Aloe Company of Kansas City, Kansas City, Mo. Booth 53.

"Aloe's 2nd Century Professional Furniture of Tomorrow."
Three table models: constructed of indestructible VYN-STEEL, luxurious Tuftex upholstery in many harmonious colors, designed to minimize tension and fatigue.
2nd Century cabinets with Formica tops—Waste Receptacles with tip-out gines, combining beauty and efficiency.
2nd Century furniture with many innovations is truly the professional "furniture of tomorrow."

Sutliff & Case Company, Inc., Peoria, Ill. Booth 54.

Smith Kline & French Laboratories, Philadelphia, Penna. Booth 55.

Our representatives welcome the opportunity to discuss SK&F products with you and are ready always to be of help in any way they can. Products featured at this meeting are: (1) Eskatrol* Spansule® capsules, (2) 'Ornade' Spansule® capsules and (3) Stelazine®.

U. S. Vitamin & Pharmaceutical Corporation, New York, N. Y. Booth 56.

Hyland Laboratories, Los Angeles, Calif. Booth 57.

The research facilities of Hyland Laboratories are directed to the development of improved and new diagnostic aids. Through such research, Hyland has made notable advances in rapid slide screening tests for the detection of the Rheumatoid factor, Gamma Globulin levels, C-Reactive Protein, Hypofibrinogenemia and Thyroglobulin autoantibody. And now an informed staff at our booth welcomes the opportunity to discuss the most recent additions to our line of latex screening tests: Latex Nucleoprotein Reagent for detection of the lupus factors and Hyland's Latex-Trichina Reagent as a laboratory aid in the diagnosis of Trichinosis.

MISSOURI ACADEMY

(Continued from page 108)

year's program was the presentation of gold pins to four Academy members who have practiced medicine for 50 years. Two of these four members were present to receive the pins from Dr. Hall, with Dr. Robert C. McElvain in the picture receiving his pin and Dr. L. A. Millikin waiting to receive his. Dr. Wm. J. Langan and Dr. A. H. Sewing were unable to be present to receive their pins on this occasion.

Another feature on the program was the reading of the names of 55 members of the St. Louis Academy who had helped in the TB patch testing program for St. Louis County school children during the past eight years. Certificates of award recognizing a real community service were presented to all of these physicians. The evening formalities were completed in due time and then the beautiful music of Don Stolz's orchestra produced the stimulus for an enjoyable period of dancing.

This year's Installation Dinner-Dance program, coupled with the pleasant atmosphere of the banquet room at the Missouri Athletic Club, produced an atmosphere which will undoubtedly help in promoting an even better, similar occasion in 1961.

WOMAN'S AUXILIARY

(Continued from page 110)

sion on Medical Care Costs, and one of its functions will be to try to keep the public from spending hard-earned money for worthless products. It is sad, indeed, to see money thrown away uselessly in a search for health in this land where the best medical care on earth is available. Our Auxiliary should find ways to help promote this important A.M.A. program.

The first two days of December were visiting days. I went to meet with Jefferson County in that beautiful woodsy country high above the Mississippi River south of St. Louis. Here I found a small, charming group of doctors' wives who carry on a fine Auxiliary program. On to Sedalia I travelled the next day to meet with wonderful Pettis County. Once again, I went to these meetings to bring inspiration, but came away personally inspired.

February is the month of Hearts and Flowers, and of remembering great times in the history of our country—the abolition of slavery, Valley Forge, Crossing the Delaware, and the events that led to the Declaration of Independence. Let us never forget that, even in that remote period of history, men of the medical profession were interested in the affairs of their country, and that one of the signers of the Declaration of Independence was a physician—Dr. Benjamin Rush.

CLASSIFIED ADS

BERNARD NURSING HOME accepts patients who are chronically ill, aged or invalided, and convalescents, whose primary need is good nursing care. Our staff is open to all accredited physicians. Facilities are available for low voltage muscular and nerve stimulation in paralytics, chronic arthritics, etc. Our home is beautifully furnished, centrally located, equipped with automatic sprinkler system, and is adequately staffed. Address 4385 Maryland, St. Louis 8, Mo., Telephone Jefferson 5-9290.

FOR SALE—A Westinghouse X-Ray with Fluoroscope, 10 years old, in perfect condition. Original cost $4,000. Will sell at a reasonable price. Please contact Mrs. Margaret Lockwood, Slater, Mo.

FOR SALE OR LEASE—General and surgical practice in beautiful southwest Missouri city with population of over 11,000. Many recreational advantages. Unusual opportunity. Gross $65,000 per year. New spacious one-floor, well-equipped, six-room office with large parking area. Will finance. Contact Trust Department of First National Bank of Joplin, Joplin, Missouri.

ST. VINCENT'S HOSPITAL SAINT LOUIS 33, MISSOURI

A 290-bed private, non-profit, neuropsychiatric hospital, located in suburban St. Louis; offering all accepted psychiatric therapies and the essential diagnostic services of a general hospital; featuring an extensive professionally-directed Occupational Therapy program.

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- Active treatment geriatrics
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- Three full-time psychiatrists, plus psychiatric staff of 25
- 24-hour medical service, plus consulting staff of 29
- 1:1.76 ratio of nursing staff to patients, including 40 RN's

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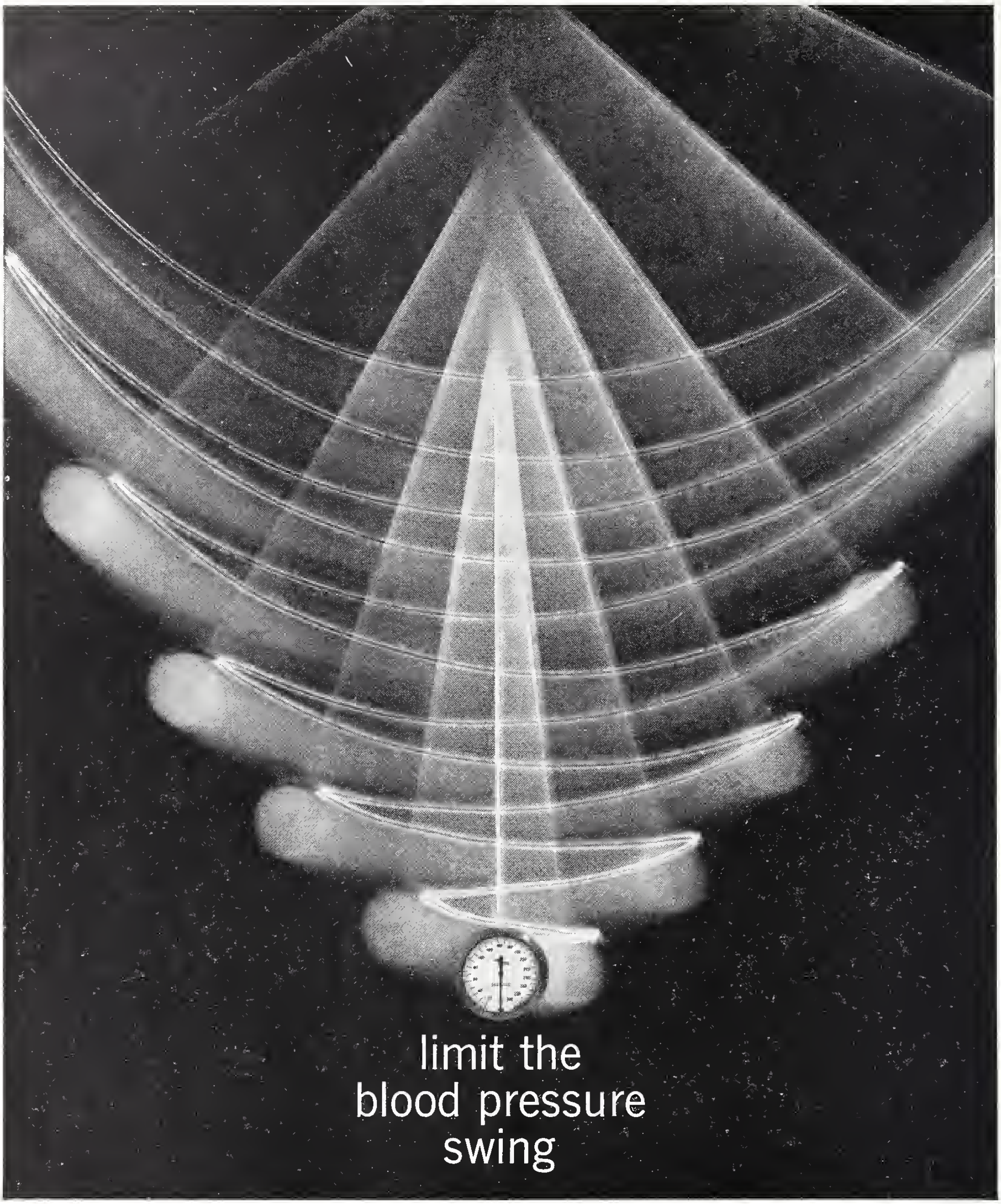

Rautrax-N lowers high blood pressure gently, gradually . . . protects against sharp fluctuations in the normal pressure swing. Rautrax-N combines Raudixin, the cornerstone of antihypertensive therapy, with Naturetin, the new, safer diuretic-antihypertensive agent. The complementary action of the components permits a lower dose of each thus reducing the incidence of side effects. The result: Maximum effectiveness, minimal dosage, enhanced safety. Rautrax-N also contains potassium chloride — for added protection against possible potassium depletion during maintenance therapy.

Supply: Rautrax-N — capsule-shaped tablets — 50 mg. Raudixin, 4 mg. Naturetin, and 400 mg. potassium chloride. Rautrax-N Modified — capsule-shaped tablets — 50 mg. Raudixin, 2 mg. Naturetin, and 400 mg. potassium chloride. For complete information write Squibb, 745 Fifth Avenue, New York 22, N. Y.

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Squibb Standardized Whole Root Rauwolfia Serpentina (Raudixin) and Benzydroflumethiazide (*Naturetin) with Potassium Chloride

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

The American pharmaceutical industry spends about one dollar per year for each person in this country on research and development.

After the invention of spectacles, about 450 years elapsed before frames were designed to obtain support from the nose and the side of the head.

The "weaker" sex again: 26 per cent of men with proven cancer live five years; but 37 per cent of women survive that period.

In 1666, medical crusader Daniel Sennert, irritated at the infrequent recognition of gout, labeled it "the physician's shame." After nearly three centuries of scientific advancement, Dr. Philip Hench had little trouble in accumulating a hundred cases of gout in whom the time lapse from first attack to diagnosis averaged fifteen years.

Capsule Clinics

- Almost any twisting and bending exercise is effective in management of dysmenorrhea, provided the regimen is executed regularly and often. Golub, L. J., *et al.*, Obst. & Gynec. **16**:469, 1960.

- At about 40 years of age there is a sudden acceleration in sensitivity to glare. Wolf, E., Arch. Ophthalmol. **64**:502, 1960.

- Nasal decongestion without rebound was accomplished in approximately 90 per cent of children given Sudafed or Actifed orally. Lipschutz, A., Ann. Allergy **18**:998, 1960.

- Caution should be exercised in diagnosing diabetes in acutely ill and recently injured patients. Glucose tolerance may return to normal upon restoration of health. Locke, W. J., Michigan M.S. **59**:1528, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Assistant Secretary of HEW

Professor Wilbur J. Cohen has been appointed as Assistant Secretary of the Department of Health, Education and Welfare. This is of special interest because Professor Cohen, long known as an advocate of compulsory health insurance, served as chairman of a Task Force on Health and Social Security which was appointed by President Kennedy.

Other members of the task force, none of whom was a practicing physician, were Dean A. Clarke, M.D., General Director, Massachusetts General Hospital; James Dixon, M.D., President, Antioch College, Yellow Springs, Ohio; Herman M. Somers, Ph.D., Chairman and Professor, Department of Political Science, Haverford College, Haverford, Pa.; Robert E. Cooke, M.D., Professor of Pediatrics, Johns Hopkins University, Baltimore, Md.; Joshua Lederberg, Ph.D., Professor of Genetics, School of Medicine, Stanford University, Palo Alto, Calif., and Elizabeth Wickenden, Acting Director, Project of Public Services for Families and Children, New York School of Social Work, Columbia University, New York City.

Federal Aid Analyzed

The Budget Bureau has issued a special report analyzing the federal financial aid to state and local governments, as proposed in the 1961-1962 federal budget. In health and welfare it is pointed out that public assistance, hospital construction, public health grants, vocational rehabilitation and related projects would use $3.3 billion, or about 40 per cent of the amount to be paid out by the U. S. Treasury in state or county aid. Of the $167 million allocated for the Hill-Burton program, 56 per cent will be earmarked for non-profit private projects.

White House Conference on Aging

The White House Conference on Aging concluded on January 12 with a recommendation for a social security health care plan similar to the one advocated by President Kennedy. The vote by the Income Maintenance Section, which dealt with this issue, was 170 to 99. The 99 in the minority issued a report which declared that incorporating medical insurance under Title II of the Social Security Act "would interfere with the physician-patient relationship; that it is unnecessary because of the potential growth of voluntary insurance, and that all needy aged can be cared for by public assistance through the recently enacted federal program of health care for the low income aged." The minority report also pointed out that the majority report was not in accord with the official expression of the majority of state conferences on aging. The Medical Care Section, chaired by Dr. Leonard W. Larson, American Medical Association President-Elect, attempted to introduce an amendment opposed to the compulsory social security medical care plan, but this was ruled out of order by the conference chairman.

Social Security Program

On February 2, the President asked Congress for a "road to recovery" program containing increased social security benefits for 4.6 million persons. White House officials declined to estimate the over-all cost of the program but said that it would not be more than $5 billion. The program would increase minimum payment for retired workers from $33 to $43 a month, allow men to retire at age 62 with reduced benefits, raise payments to 1.5 million widows from 75 to 85 per cent of their husband's benefit and expand disability insurance and liberalize eligibility requirements. The President proposed that the program be financed by an additional payroll tax of ½ per cent on the employee and ½ per cent on the employer, starting January 1, 1963.

Medical Bills Introduced

By early in February 5,270 bills had been introduced in the 87th Congress, of which 200 of them were medical bills of some form.

Official Physician

The first woman White House physician has been appointed by President Kennedy, Janet G. Travell, M.D., New York, a graduate of Cornell University Medical College, New York.

The cigarette that made the Filter Famous!

20
CIGARETTES
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CIGARETTES
NEW
EXCLUSIVE MICRONITE FILTER
KING SIZE

It's true. Kent's enormous rise in popularity—with all the attendant magazine and newspaper stories—really put momentum to the trend toward filter cigarettes!

So, Kent is the cigarette that made the filter famous. And no wonder. Kent's famous Micronite filter is made from a pure, all-vegetable material. A specially designed process at the P. Lorillard factory compresses this material into the filter shape and creates an intricate network of tiny channels which refine smoking flavor.

Kent with the Micronite filter refines away harsh flavor . . . refines away hot taste . . . makes the taste of a cigarette mild.

That's why you'll feel better about smoking with the taste of Kent.

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Across
Missouri

Dr. Thomas A. Dooley, Jr.

The Senate and House of Representatives of Missouri, as well as hundreds of individuals and organizations, took official notice of the death of Missouri State Medical Association member, Thomas A. Dooley, Jr., M.D., by the adoption of Senate Concurrent Resolution No. 6 and House Resolution No. 42.

The Senate Concurrent Resolution, introduced by Senator Michael Kinney of St. Louis, with all the other Senators from St. Louis and St. Louis County as Cosponsors, was adopted unanimously, January 24, by the Senate. The House Resolution, introduced by Representative Richard J. Rabbitt, 18th St. Louis District, and joined by all other members of the House, was adopted on January 23.

Ten Year Mental Health Program

The Mental Health program announced by the Director of Mental Diseases, Dr. Addison Duval, and the State Mental Health Commission depend to a great extent on appropriations by the General Assembly.

The Budget Department of the state has submitted a budget to the legislature in the amount of $52,063,696 for the 1961-63 biennium. This amount is an increase of about $6,500,000 over the 1959-61 biennium appropriation. However, Dr. Duval has requested an increase of $17,000,000. Dr. Duval, according to an article in the *St. Louis Post-Dispatch*, expressed keen disappointment that Governor John M. Dalton in his proposed budget "did not find the money to provide a forward step for the first biennium of our ten year mental health program."

Missouri's new Governor, in the meantime, faced with requests for additional funds from practically every state agency, has indicated that he will again carefully study the mental health budget. Governor Dalton has already requested that the legislature increase the taxes on cigarettes, beer, liquor, reenact the use tax, and establish a pay as you go withholding tax on all wages, including the self employed.

The Missouri Public Expenditure Survey, an independent agency which reports on state financing, recommended that the State increase the sales tax from 2 to 2½ per cent in lieu of the other tax increase proposals. The survey estimates that this sales tax increase "could be expected to yield $53 million in the 1961-63 biennium. It would also permit other tax proposals to be modified and withholding, with its refunds and other problems, to be dropped from the revenue program if that were desired."

It seems certain that a tax increase, in some form, will be enacted. If so, the increases for the Mental Health Program may become available.

State Withholding Tax Introduced

One of the first bills introduced in the House, H.B. 30, is an income tax withholding bill for state income. This bill would require employers, including physicians, to withhold income taxes, utilizing a withholding table to be provided by the Revenue Department, for all employees making $2,000 or more if they have no dependents, or $3,400 or more for the head of a family. Employers would be required to file quarterly returns and remittances. The suggested percentages are 2 per cent of earnings of $5,000 or less; 1 per cent of earnings from $5,000 to $10,000, and ½ per cent of earnings in excess of $10,000.

Infectious Diseases

The year has barely a good start but has registered some statistics on infectious diseases that are indicative only by comparison with former years. The total number of cases of poliomyelitis at the end of January was 44, with the similar figure a year ago 504. The comparison in meningococcal infections was 22 at the end of this January compared to 40 last year. In diphtheria, the figures are 2 and 8; in whooping cough 0 and 378; in scarlet fever 990 and 987, and hepatitis 886 and 419. One of the big contrasts is in Kansas City having only 6 cases of poliomyelitis at the end of this January as compared to 209 in January of 1959.

In
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- ✓ Curbs excessive peristalsis
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- ✓ Soothes inflamed mucosa
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Pectin N.F....................	225 mg.
Kaolin	3 Gm.
Opium tincture U.S.P....	0.08 cc.

(equivalent to 2 cc. paregoric)

DOSAGE: Adults: Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

Children: ½ teaspoon (=2.5 cc.) per 15 lb. of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

SUPPLIED: *Bottles of 16 fl. oz. (raspberry flavor, pink color)*

Exempt Narcotic. Available on Prescription Only.

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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

Committees for the ensuing year have been appointed by the President of the Missouri Academy of General Practice, Cecil G. Leitch, M.D., Blue Springs. The Committees follow:

Advisory Committee: P. V. Siegel, M.D., Smithton.

Representative to AAGP Mental Health Commission: Cecil G. Leitch, M.D., Blue Springs.

Public and Professional Relations: Elvin Imes, M.D., Maryville, Chairman; Edward Campbell, M.D., Cape Girardeau, Cochairman; Vernon E. Wilson, M.D., Columbia; L. P. McCann, M.D., Nevada; M. L. Gentry, M.D., Springfield; William Richardson, M.D., Union; John Walterscheid, M.D., Hannibal; James Sweiger, M.D., Maysville; Howard Carrington, M.D., Lebanon.

Education: Doyle C. McCraw, M.D., Bolivar, Chairman; Walter Gray, M.D., St. Louis, Cochairman; Wyeth Hamlin, M.D., Hannibal; Paul Roberts, M.D., Sweet Springs; LeRoy Miller, M.D., Columbia; William McNew, M.D., Carthage; William Rost, M.D., St. Joseph; W. J. Stelmach, M.D., Kansas City; Chester Peck, M.D., Kennett.

Hospital: Walter T. Gunn, M.D., St. Louis, Chairman; I. C. Fowler, M.D., North Kansas City, Cochairman; J. F. Trigg, M.D., St. Louis; H. A. Underwood, M.D., Kansas City; William O. L. Seabaugh, M.D., Cape Girardeau; Scott Benson, M.D., St. Joseph; Kenneth Knabb, M.D., Springfield; Harry O'Brien, Mexico; T. Reed Maxson, M.D., Warrensburg.

Publication: Barney Finkel, M.D., St. Louis, Chairman; Roy W. Pearse, Jr., M.D., Nevada, Cochairman; Kenneth Glover, M.D., Mount Vernon; W. A. Mularky, M.D., St. Louis; C. G. Stauffacher, M.D., Sedalia; Ralph Perry, M.D., Kansas City; R. D. Dwyer, M.D., North Kansas City; W. J. Shaw, Sr., M.D., Fayette; John F. Pearl, M.D., St. Clair.

Finance: John F. Pearl, M.D., St. Clair, Chairman; A. J. Graves, M.D., Mount Vernon, Cochairman; Norton J. Eversoll, M.D., St. Louis.

Medico-Legal: Charles O. Metz, M.D., St. Louis, Chairman; G. Donald Shull, M.D., Jefferson City, Cochairman; T. L. Dwyer, M.D., Mexico; Luke A. Knese, M.D., St. Louis; A. E. Spelman, M.D., Smithville; William C. Ganley, M.D., Kansas City; C. A. McBurney, M.D., Slater; O. B. Barger, M.D., Harrisonville; J. R. Cochran, M.D., Cape Girardeau.

Membership: P. C. Hall, M.D., St. Louis, Chairman; E. D. Carrier, M.D., Kansas City, Cochairman; Eugene B. Robichaux, M.D., Excelsior Springs; James A. Reid, M.D., Marshall; George H. Wood, M.D., Carthage; John Middleton, M.D., Louisiana; Owen W. D. Craig, M.D., St. Joseph; John T. Crowe, M.D., Cape Girardeau; Robert H. Tanner, M.D., Jefferson City.

EARLY CARE OF MULTIPLE INJURIES

A one-day symposium on "The Early Care of Multiple Injuries" will be presented at the Medical Center Auditorium, Columbia, on April 6. The symposium will be sponsored by the University of Missouri School of Medicine, the Missouri State Medical Association, the Missouri Division of Health and Medical Education for National Defense.

PROGRAM

9:00 a.m. Planning for the Care of Multiple Casualties:
    Community Disaster Plans, Oscar P. Hampton, M.D., University City.
    Hospital Disaster Plans, Curtis H. Lohr, M.D., St. Louis.
    Sorting of Casualties (Triage), John A. Growdon, M.D., Kansas City.
11:00 a.m. Coffee Break.
11:15 a.m. Chemical and Biological Warfare.
    Irradiation Injuries.
    Moderator: Clement Brooke, M.D., Columbia.
    Panelists:
        Ardath Emmons, Ph.D., Columbia.
        Frank E. Engley, Ph.D., Columbia.
        Carroll P. Hungate, M.D., Kansas City.
2:00 p.m. Life Saving Measures on Admissions, John J. Modlin, M.D., Columbia.
2:45 p.m. The Initial Care of Burns, Curtis Artz, M.D., Jackson, Miss.
3:45 p.m. Coffee Break.
4:00 p.m. The Care of Wounds, Oscar P. Hampton, M.D., University City.

“nutrition . . . present as a modifying or complicat-
g factor in nearly every illness or disease state”[1]

1. Youmans, J. B.: Am. J. Med. 25:659 (Nov.) 1958

rdiac diseases “Who can say, for example, whether the patient chronically with myocardial failure may not have a poorer myocardium because of a moderate iciency in the vitamin B-complex? Something is known of the relationship of vitamin o the intercellular ground substance and repair of tissues. One may speculate upon effects of a deficiency of this vitamin, short of scurvy, upon the tissues in chronic ease.”[2] 2. Kampmeier, R. H.: Am. J. Med. 25:662 (Nov.) 1958.

thritis “It is our practice to prescribe a multiple vitamin preparation to patients h rheumatoid arthritis simply to insure nutritional adequacy . . .”[3]
nandez-Herlihy, L: Lahey Clinic Bull. 11:12 (July-Sept.) 1958.

gestive diseases Symptoms attributable to B-vitamin deficiency are comnly observed in patients on peptic ulcer diets.[4] Daily administration of therapeutic amins to patients with hepatitis and cirrhosis is recommended by the National search Council.[5] 4. Sebrell, W. H.: Am. J. Med. 25:673 (Nov.) 1958. 5. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition, National Academy of Sciences and National Research Council, Washington, D. C., 1952, p. 57.

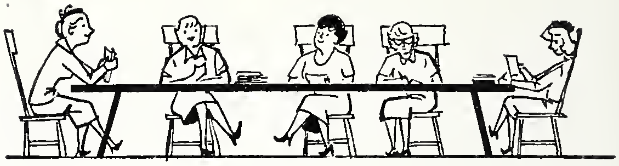
generative diseases “Studies by Wexberg, Jolliffe and others have indied that many of the symptoms attributed in the past to senility or to cerebral arterioerosis seem to respond with remarkable speed to the administration of vitamins, ticularly niacin and ascorbic acid. These facts indicate that the vitamin reserve of ng persons is lowered, even to the danger point, more than is the case in the average nerican adult.”[6] 6. Overholser, W., and Fong, T.C.C. in Stieglitz, E. J.: Geriatric Medicine, 3rd edition, J. B. Lippincott, Philadelphia, 1954, p. 264.

fectious diseases Infections cause a lowering of ascorbic acid levels in the sma; and the absorption of this vitamin is reduced in diarrheal states.[7] 7. Goldsmith, G A.: erence on Vitamin C. The New York Academy of Sciences, New York City, Oct. 7 and 8, 1960. Reported in: Medical Science 8:772 (Dec.10) 1960.

abetes Diabetics, like all patients on restricted diets, require an extra source vitamins.[8] “Rigidly limiting the bread intake of the diabetic patient automatically minates a large amount of thiamin from the diet. . . . There is some evidence of erference with normal riboflavin utilization during catabolic episodes.”[9]
ncan G. G.: Diseases of Metabolism 4th edition W. B. Saunders, Philadelphia, 1959, p. 812. 9. Pollack, H.: Am. J. Med. 25:708 (Nov.) 1958.

R FULL INFORMATION SEE YOUR SQUIBB PRODUCT REFERENCE OR PRODUCT BRIEF.

Woman's Auxiliary



"Farewell Performance!" Stars of stage, concert and the opera world have retired with these words blazing over the theater entrance. Sir Harry Lauder made repeated farewell tours in this and in other countries. But, with this page in Missouri Medicine there are no return farewell performances.

Mrs. Jordan Kelling

At a time like this it is natural to look back a year, and the words of Robert Frost come to me: "They would not find me changed from him they knew; Only more sure of all I thought was true."

Of what am I more sure? For one thing, I am more sure that the things I said when I accepted the gavel last year from the hand of Marjorie Peterson are true.

"That this is a great honor I cannot deny," I said at that time last year. "I have only to look at the list of names of those who have preceded me in this office to realize that to be considered worthy and capable of leading this fine organization is honor enough to satisfy any woman for her whole lifetime.

"I look at the list of the names of Past Presidents, and I find myself wishing I had the brains of one, the executive ability of another, the charm and grace and poise of another; and I realize that the best I can offer is my great love for the Auxiliary.

"As I look at the list of those names I remember the inspiration so many of them have been to me; how I looked up to them; how, when I was a doctor's young wife, they filled me with pardonable pride that I was a doctor's wife, too, and privileged to belong to the Auxiliary; and how they filled me with love and interest for the Auxiliary.

"I know that I am accepting responsibility and the obligation to do a great deal of work. But, work that is a labor of love is never really hard work; in fact, they say that nothing is really work unless you had rather be doing something else. Right now I want to work for the Auxiliary. And, as I work, if I can remember to support the activities of the Auxiliary, to protect its reputation, and to ever sustain its high ideals—and if I can gauge my actions to these standards—perhaps I can be a credit to you. I hope so.

"I am a great believer in the value of motives. If a motive is good the results of a project will usually be good. An Auxiliary member need never apologize for the quality of the motives of this organization. They are all good.

"Thank you, one and all, for this honor you have bestowed upon me. Let me repay you by allowing me to serve you."

Yes, the year has found me unchanged, except that I am more sure today that what I said was, indeed, true.

I know that every state president has worked with the conviction that she acted not only for herself, but that she was paving the way for her successor. I stepped into a place completely prepared for me by Marjorie Peterson. All this year I have felt that I was, more or less, "twins," acting on my own and in behalf of Jane Wade. It is the ardent wish of each state president that the work will go on uninterrupted by a change in leadership, and that the individuality and fresh inspiration a new president brings to the organization will serve as a spur to bring the work to happy completion. Each new president brings to the state Auxiliary talents and abilities which are distinctly her own, and Jane Wade is rich in such talents and abilities. Under her leadership we can look forward to an outstanding year in Auxiliary.

Two delightful visits were made during the "summertime" we enjoyed early in January—to Kansas City to visit Jackson County, who will be our hostesses at the convention in March, and to Joplin to visit with Jasper County. By the time these words are read I shall have made three more visits to which I have been eagerly looking forward—Buchanan County, in St. Joseph; Boone County, in Columbia; and Dunklin County, in Kennett. And there will be the trip to Chicago to attend the A.M.A. Rural Health Conference.

Legend tells that the swan, before taking earthly parting from his fellow swans, flies high, high into the air and sings the most beautiful song ever heard. This is my swan song, and, if I had the talent to compose a proper musical finale, it would be a glorious hymn of thanks to officers and chairmen, to county presidents and the members of those auxiliaries, and to past state presidents. It would also include a stanza for those

(Continued on page 312)

Volume 58, Number 3—March, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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JOHN W. POLK, M.D., *Springfield;* **ALAN H. BAILEY, M.D.**,
and **DIMITRIOS G. GREGORIADES, M.D.**, *Mount Vernon,*
and **W. W. BUCKINGHAM, M.D.**, *Kansas City*

Malignant Lesions of the Chest Wall

Eight cases of primary malignancy involving the chest wall are presented to add to the somewhat limited literature on this subject. Summaries, follow-up reports and illustrations of the pathologic lesions are presented.

Dr. Polk is Chief of Surgical Service; Dr. Bailey is Assistant in Surgery; Dr. Gregoriades is Resident in Thoracic Surgery, and Dr. Buckingham is Consultant in Thoracic Surgery, all of the Missouri State Sanatorium, Mount Vernon, Missouri.

Primary malignancies arising in the chest wall are not rare. However, there has been relatively little presented in the literature on this subject. Campbell presented 57 cases of osteogenic sarcoma, including one case of primary rib tumor, and later presented one case of Ewing's sarcoma. Blades and Paul in 1950 presented cases of chest wall tumors including benign and malignant lesions. Forty-seven per cent of the tumors described in this report were malignant. This appeared to have been the first adequate summary of chest wall tumors presented in over a decade.

Since that time, individual case reports have occurred. A review of the clinical experiences with 30 cases has recently been presented by Spears, Daughtry and Chesney. Again these included benign tumors of the chest wall and primary and metastatic malignant lesions were also discussed.

It is the purpose of this paper to present eight cases of primary malignancy involving the chest wall. In two of these, malignancy occurred in old thoracoplasty site, one occurring 15 years after the original Schede thoracoplasty, the second, two years after a postresection thoracoplasty. No cases of bronchogenic carcinoma with extention to the chest wall have been included in this report and no metastatic lesions are included. A brief summary of these cases is given with follow-ups and illustrations of the pathology shown.

Case Reports

Case 1. C. McK. This 62 year old white male had previously had a biopsy of the sternum in July, 1954, at which time diagnosis of plasma cell cytoma was made. No further surgery was done. He was then admitted to the Missouri State Sanatorium on January 5, 1955, with a huge tumor involving the lower two thirds of the sternum and the anterior chest wall.

On January 12, 1955, wide en bloc resection of the anterior chest wall was performed from the second through the sixth ribs. The lesion was partially adherent to the anterior pericardial sac and it was necessary to excise these areas. The tumor was highly vascular. Microscopic section of this lesion revealed malignant plasmacytoma and invasion of the surrounding tissues.

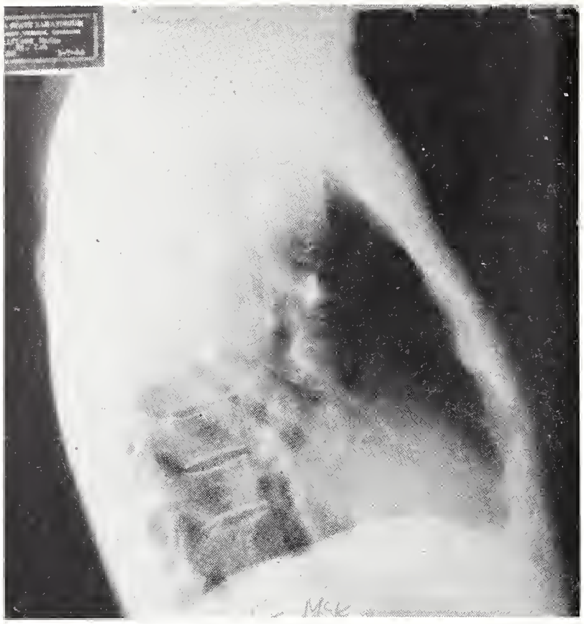

Fig. 1. Case 1. Note increased thickness and cystic areas on the posterior portion of the sternum.

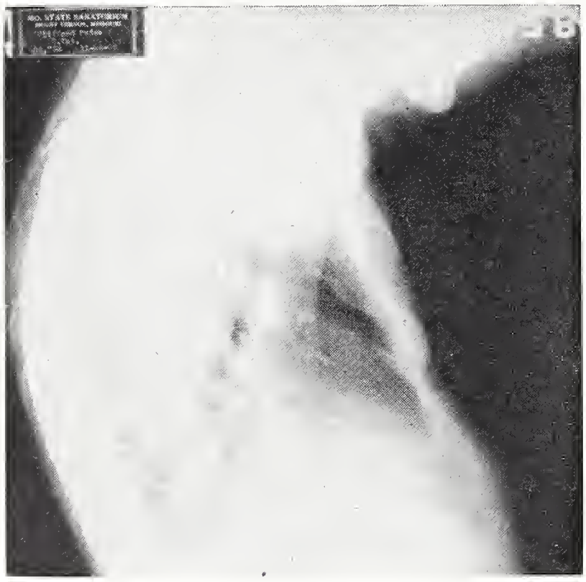

Fig. 2. Case 1. Shows regeneration of bone around the sternum.

The patient was lost to all follow-up three months after surgery until September, 1958. His second admission to the Sanatorium was November 20, 1958. X-ray at this time showed marked destructive lesions in the calvarium, the right and left humerus and in each femur. There was complete collapse of the fifth dorsal vertebra also with marked destructive lesion through all ribs. The patient was given blood transfusions and other heroic therapy. He expired in March 1959 at his home. No autopsy was obtained.

Case 2. C. McC. This 56 year old white male was admitted to the Missouri State Sanatorium on April 11, 1956. He had noticed a small lump in the right lower chest in March 1955. Later in March of 1955 there was local attempt to remove the tumor from the chest wall. Following recurrence of this he had excruciating pain and was admitted to the Sanatorium approximately one year later at the advice of his local physician.

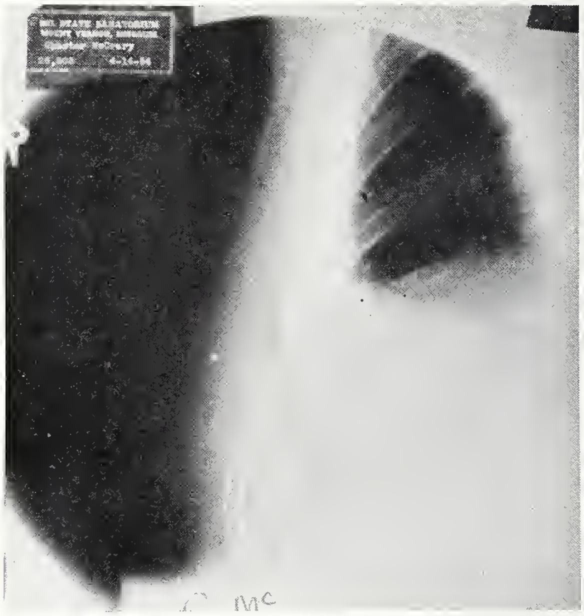

Fig. 3. Case 2. Spot film shows destruction of ribs and mass in the lower right chest.

Examination revealed a well developed, well nourished white male who was not acutely ill. There was a four inch scar over the right lower chest. There was a hard mass measuring 14 by 12 cm. over the lower right chest in the axillary area. X-ray revealed that the eighth through the eleventh ribs were destroyed. On April 23, 1956, en bloc resection of the chest wall, including the seventh, eighth, ninth and tenth ribs was carried out. Pathologic diagnosis was osteolytic osteogenic sarcoma of chest wall. The wound healed by primary intentions. Patient was discharged on May 9, 1956.

The patient expired in April 1957. A note from his local physician stated that he died of ruptured aortic aneurysm although no autopsy was done. The physician had noted no recurrence of the malignant chest wall process.

Case 3. E. M. This 67 year old Negro female was admitted to the Missouri State Sanatorium on August 6, 1959. She had complained of a large mass, painful in nature, over the upper anterior left chest. Physical examination was normal except for the presence of a hard, fixed, firm mass in the center of the left chest measuring 6 by 7 inches in all directions. It was firm and adherent to the chest wall but was not adherent to the breast.

X-ray revealed a rounded, sharply outlined density in the lower two thirds of the anterior chest wall noted to be anterior in position.

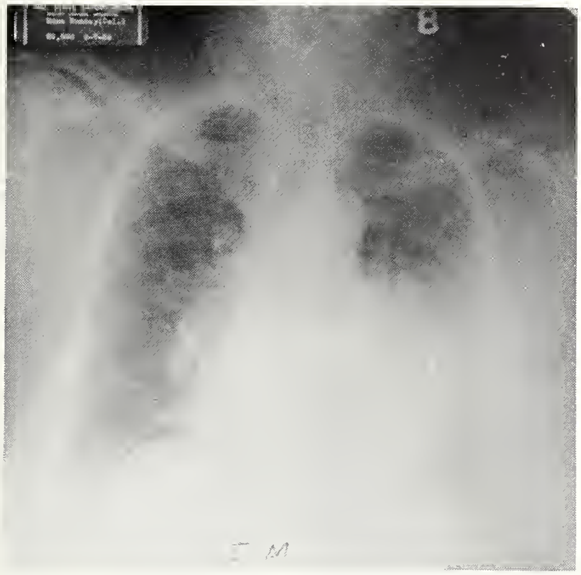

Fig. 4. Case 3. Shows large mass in the left chest.

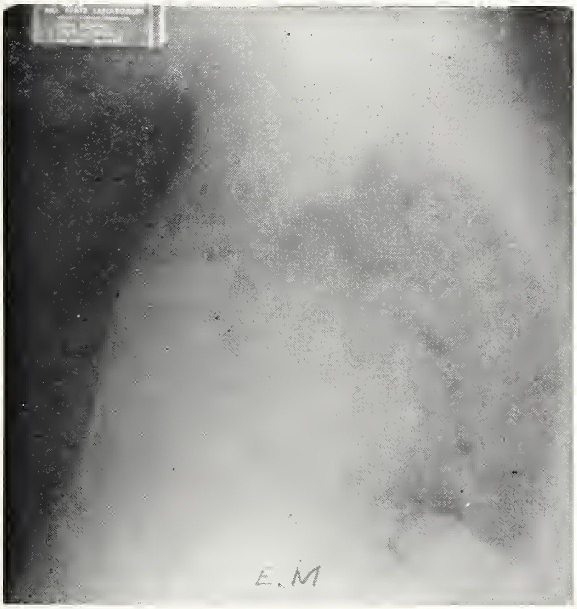

Fig. 5. Case 3. Shows rounded mass extending into the left pleural space.

On August 19, 1959 en bloc resection of the anterior chest wall with removal of large fibrosarcoma was accomplished. This included resection of portions of the third, fourth and fifth ribs anteriorly and the surrounding muscles. There were no adhesions between this mass and the lung. The resultant chest wall defect was closed with tantalum mesh prosthesis.

Microscopic examination of the resected specimen proved it to be a fibrosarcoma of the chest wall with invasion of two ribs. Patient was discharged on September 5, 1959, and follow-up office examination on September 20, 1960 showed no recurrence of the tumor. She remains in good health.

Case 4. B. H. This 59 year old white male was admitted to the Missouri State Sanatorium for the fifth time on September 14, 1959. On November 5, 1957 an apical posterior segmental resection of the right upper lobe had been performed for fibrocaseous, cavitary, granulomatous pneumonitis secondary to histoplasmosis. On December 18, 1959 postresection thoracoplasty had been performed to obliterate a small residual pleural space. In January 1958, right scapulectomy had been done.

The patient did well until June 1959 when he began to have severe pain in the right chest wall. He later noticed a small lump which developed in the right axillary region which was tender to pressure. The mass continued to enlarge and he stated he lost 30 pounds of weight.

Physical examination revealed a postoperative scar, well healed, on the right chest with typical thoracoplasty deformity. In the area of the fifth rib in the anterior axillary line there was a firm, hard tumor which appeared to be attached to the surrounding structures. This tumor was tender to pressure.

On September 18, 1959 excision of the previous car was performed along with an en bloc resection of the hard tumor mass. This included portion of the fifth rib, chest wall and pleura. The mass had infiltrated the serratus anterior muscle and the chest wall. The defect produced in the chest wall was then corrected with tantalum mesh prosthesis.

The patient was then discharged September 28, 1960. Microscopic study of the tumor revealed it to be a fibrosarcoma, possible low grade malignancy.

Case 5. G. S. This 5 year old boy developed pneumonia in March 1945. At that time a mass was discovered in the left lateral chest wall. After improvement he went to the Mayo Clinic where the lesion was biopsied. The family stated that they were told they could not remove the lesion and advised radiation therapy.

The boy then returned to Kansas City where he was seen by Dr. Buckingham. Physical examination revealed a mass in the region of the fourth rib on the left with a small surgical scar. The entire left chest was dull to percussion. X-ray revealed a pleural effusion on the left, pushing the heart and mediastinum to the right. There was also destruction of a portion of the fourth rib.

On May 20, 1954, a curved incision was made over the mass. The lesion was excised with a portion of skin, chest wall and fourth rib. As the pleura

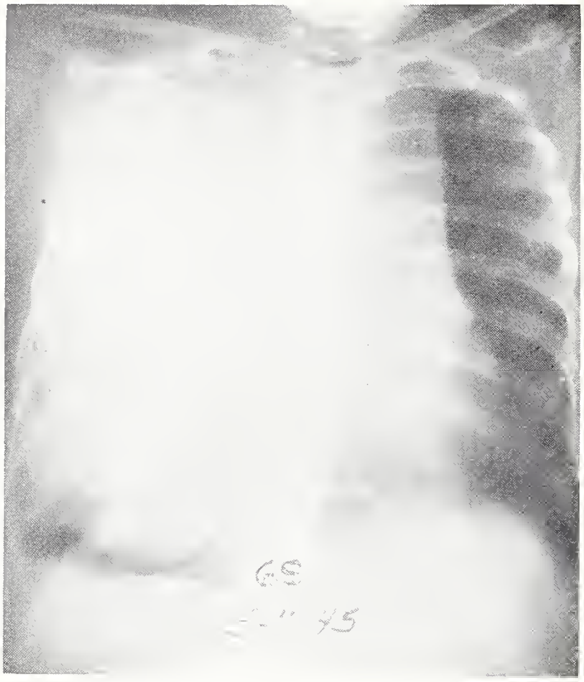

Fig. 6. Case 5. Shows portion of the 4th rib with destruction.

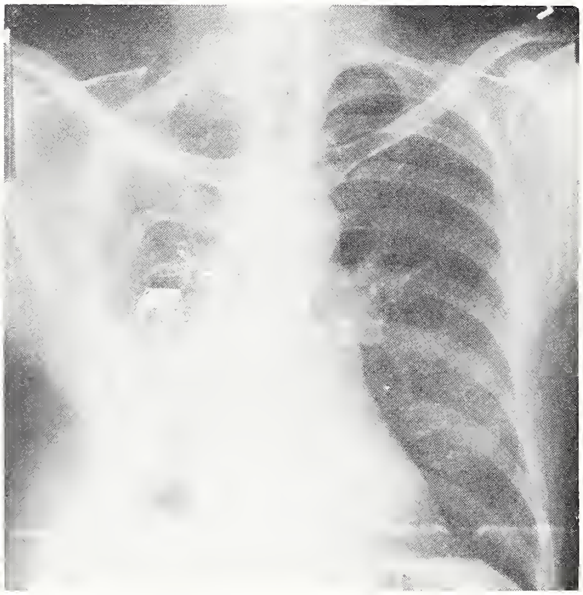

Fig. 7. Case 6. Bronchogram showing cystic cavitation and extent of collapse by Schede thoracoplasty.

was entered, about 1,000 cc. of straw-colored fluid were removed. Following this en bloc resection of the chest wall, the wound was closed tight. Except for pleural effusion postoperatively the patient's convalescence was satisfactory. He received 20 radiation therapy treatments to the left chest following this.

The patient has had checkups over a period of years. He is now 20 years old and attending college.

Pathologic diagnosis was osteogenic chondrosarcoma.

Case 6. H. W. This 55 year old white male stated that at the age of 21 he developed an empyema of the right pleural space. A rib resection was done at that time and for the next 15 years he had a cough with large amounts of purulent material. In 1946 he was admitted to the Missouri State Sanatorium at which time a diagnosis of bronchopleural fistula with empyema was made. A Schede thoracoplasty in two operations over the empyema space was performed. After approximately three months he was discharged and did well until October 15, 1957. At that time he took an upper respiratory infection and began to cough up thick, yellowish, foul sputum. On October 25, 1957, he developed severe pain in the left chest, excruciating in character. He was treated with diathermy without relief. The patient was seen in consultation.

Physical examination revealed a well developed, 55 year old white male with a massive Schede thoracoplasty deformity over the right chest. There was tenderness to pressure over the entire right chest. The left lung presented no abnormalities.

X-rays revealed partial resection of the fourth through the tenth ribs on the right with collapse of this portion of the right lung. On bronchogram a large abscess cavity was noted to be connected with the bronchus and the apex of the right lower lobe. Bronchiectasis was also noted. On December 2, 1957, thoracocentesis was performed and approximately 20 cc. of thick, yellow pus was obtained. Cultures were sterile. The patient continued to have severe pain and on December 10, 1957, a right thoracotomy was planned with possible revision of the thoracoplasty. The previous incision was reopened. As the incision was carried through the extracostal muscles, necrotic tissue was found to extend throughout the chest wall. Frozen sections revealed this to be sarcoma. It was felt that it was impossible to resect this massive involvement of the chest wall and the wound was closed. Final pathologic diagnosis was rhabdomyosarcoma. The patient was discharged from the hospital December 21, 1957, and committed suicide on December 28, 1957.

Case 7. M. Y. This 52 year old Negro female was seen at Burge Hospital, Springfield, Mo., on September 22, 1959. She complained of severe pain in the right chest with a weight loss of 15 pounds in the last year. Physical examination revealed a well developed, small, 52 year old Negro female. There was dullness to percussion over the right posterior chest wall with tenderness in this area. X-ray on October 4, 1959, revealed an extremely large mass with a homogeneous density in the posterior half of the medial zone of the right hemithorax. The lesion was sharply demarcated. The lateral projection revealed that the anterior margin was well delineated. The posterior portion could not be outlined, blend-ing with the chest wall. On October 6, 1959, right thoracotomy was performed. The seventh rib was removed along with the portion of the eighth rib posteriorly where the tumor was attached. The patient tolerated the surgery well and was discharged October 14, 1959.

Pathologic diagnosis was ganglioneuroma, low grade malignancy, with invasion through the capsule in several areas.

Case 8. C. S. This 35 year old white female delivered a healthy, 9 pound baby on April 5, 1960. Routine hospital x-ray on April 6, 1960, revealed an extensive lobulated tumor occupying the lateral portion of the right chest. No evidence of rib erosion could be seen. The history and physical examination on this case were entirely noncontributory.

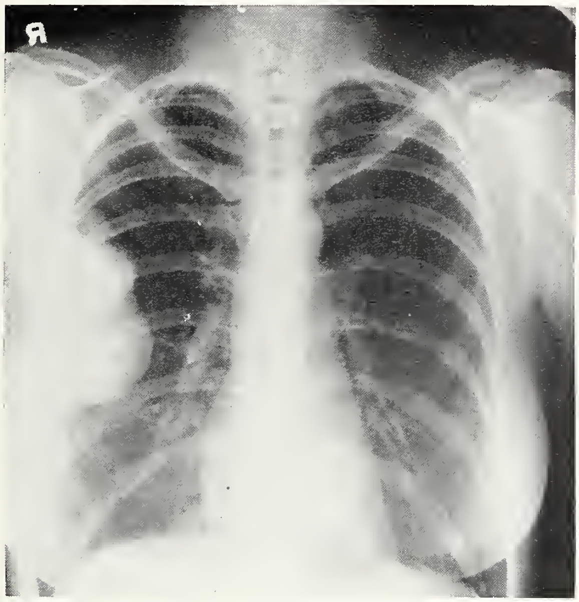

Fig. 8. Case 8. Shows extensive fibrosarcoma involving the right chest wall and invading the pleural space.

On April 22, 1960 a right thoracotomy was performed. The pleural cavity was entered through the sixth interspace beneath the tumor. The growth was found to be invading the fourth and fifth interspaces and lying free in the pleural space. An en bloc resection of the fourth, fifth and sixth ribs around the growth was then accomplished and the tumor removed. A tantalum mesh sheet was placed over the defect and sutured to the chest wall. The wound was then closed. The patient has done well since that time.

Pathologic diagnosis was fibrosarcoma, right chest wall.

SURGICAL RESULTS

Results of our experiences with primary malignancy of the chest wall are summarized by stating that of eight patients described, three are dead. The patient with the malignant plasmacytoma of the sternum expired more than four years after radical excision of the sternum and chest wall had been performed. It is interesting to note that he expired of wide-spread metastasis. The second patient expired approximately 12 months after resection of the chest wall for an osteolytic osteogenic sarcoma. His physician stated he felt he had expired from a ruptured aortic aneurysm. No autopsy was obtained. Case 6 expired approximately three weeks after exploration, committing suicide. Of the five patients living, none has been demonstrated to have recurrences. Three of these were diagnosed as fibrosarcoma of the chest wall. One is malignant ganglioneuroma and the other has an osteochondrosarcoma.

SURGICAL CONSIDERATIONS

All primary malignancies of the chest wall should be considered resectible if early and adequate approach to these lesions is performed. The thoracotomy approach, entering the pleural space an adequate distance from the primary malignancy, is manditory. Frozen sections are indicated to determine the nature of the lesion. A radical resection around the entire involved area can then be accomplished.

Various technics have been devised to repair the chest wall defects which attend excision of these malignant lesions. Spears, Daughtry and Chesney close the defects by shifting muscle flaps and using elevated flaps of periosteum to close the defects. In the majority of our cases we have preferred to close the defect with tantalum mesh sheet, cutting this slightly larger than the defect and suturing it securely over the defect on the external surface of the ribs. In the five cases handled in this manner, we have had no migration of the prosthesis nor has there been any infection occurring in these patients. After the fibrous tissue seals the area, the chests are stable and firm.

SUMMARY

Our clinical experiences with eight malignant lesions of the chest wall has been presented. Of the three patients who are dead, two had biopsies and inadequate excision prior to adequate surgical removal. This would support early and adequate resection. Of the five living, three were

(Continued on page 222)

J. S. SANDERS, M.D., *and* **C. THORPE RAY, M.D.,** ***Columbia***

Disorders of Potassium Metabolism

Normal physiologic functions of potassium are presented. The relative concentrations of potassium in extracellular and intracellular fluids are discussed in relation to the mechanism of development of various disease states. The clinical and electrocardiographic manifestations of abnormal concentrations of potassium are presented. The importance of the electrocardiogram in diagnosis and in following therapy of adnormalities in concentration of potassium is emphasized.

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THE TOXIC effects of abnormal concentrations of potassium have been known for many years. Studies on the frog's heart with solutions of high potassium content as well as prolonged exposure to solutions deficient in potassium were shown by Sidney Ringer to produce profound effects on the myocardium. He found that solutions with a high concentration of potassium "diminish the frequency of spontaneous contraction" and eventually "arrest the ventricle in diastole."[1] On the other hand, a solution high in concentration of sodium and deficient in potassium "produces persistent spasm and arrests the ventricle in systole."[2] In addition to its importance in maintaining adequate myocardial function, potassium is necessary in the metabolism of all cells. The physiologic functions of potassium include: (1) Maintenance of osmolality between intracellular and extracellular fluid; (2) maintenance (with other ions) of normal acid-base balance; (3) acting as a building unit for the cell (a large fraction is bound to protein, glycogen and phosphate); (4) influencing nerve impulse conduction, and (5) affecting muscle functions of contraction and energy production as well as excitability of the muscle cells.

One of the difficulties in determining the status of potassium in the body lies in the fact that it is predominantly an intracellular ion. Sampling of the small extracellular fluid compartment does not reflect the content of the major intracellular compartment. The use of radioactive isotopes to determine exchangeable potassium has shown the total body concentration to vary with body weight.[3] The approximate amount and distribution of potassium can be seen in figure 1.

The regulation of potassium balance is accomplished primarily via the kidney. Only from 5 to 10 per cent of daily intake is excreted in normal stools and 90 to 95 per cent by way of the kidney. Renal disease with loss of the major pathway of excretion is commonly associated with abnormality in balance as well as concentration of potassium. Since the normal rate of glomerular filtration would result in the filtration of 800 to 900 mEq. of potassium daily, the tubular excretion of this ion is difficult to assess. However, it is felt by some investigators[4, 5] that tubular secretion rather than glomerular filtration accounts for most of the excretion of the ion. The principle determining factor controlling the quantity secreted by the tubules is the ion exchange mechanism, wherein either potassium or hydrogen ions are substituted for sodium ion in the tubules. The urinary concentration of these ions depends upon the amounts available in the tubular cells, the serum pH and other metabolic factors.

There are two readily recognizable abnormalities in the concentration of potassium in the

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LESIONS—Continued

diagnosed as fibrosarcomas of the chest wall. These have appeared to be slow-growing and we feel the prognosis is good.

A rhabdomyosarcoma occurring 11 years after extensive Schede thoracoplasty is reported and a neurofibroma in a postresection thoracoplasty, two years postoperative, is also reported.

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serum and extracellular fluids, hypokalemia and hyperkalemia. The abnormally low or high concentrations of this ion in serum do not necessarily reflect the content of potassium in the body.

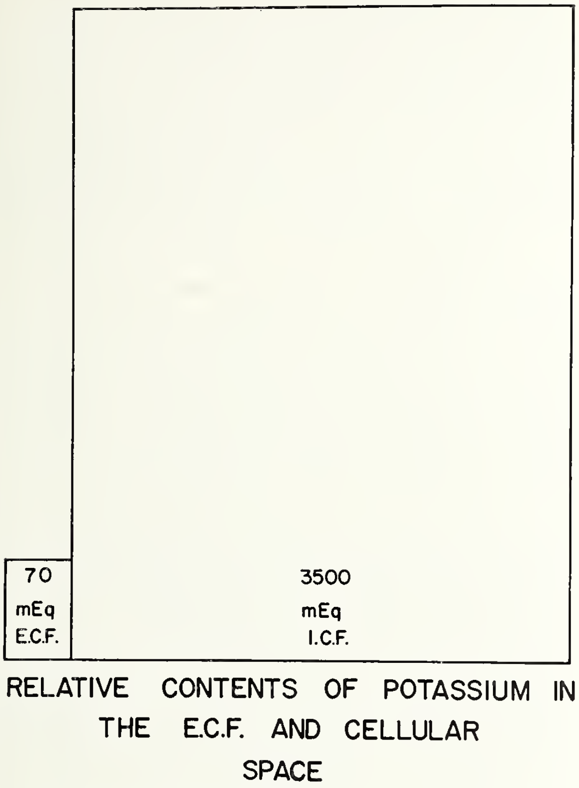


Fig. 1. Approximate concentration and distribution of body potassium in the adult.

Hypokalemia

An abnormally low concentration of potassium in the serum may result from a variety of causes:

1. Excessive loss of potassium via the gastrointestinal tract by diarrhea, prolonged vomiting or gastric suction.
2. Excessive loss of potassium in the urine in alkalosis and in certain types of renal disease.
3. Inadequate oral intake of potassium with continued excretion of small amounts of potassium in the urine. Prolonged maintenance of patients on intravenous fluids without potassium may result in hypokalemia.
4. The transfer of potassium from the extracellular compartment to the large intracellular compartment may result in fatal hypokalemia. Transfer of potassium into the cellular compartment occurs with glycogen storage in treatment of diabetic acidosis and in familial periodic paralysis.
5. Dilution of the extracellular fluids by solutions free of potassium in association with any of the mentioned mechanisms.

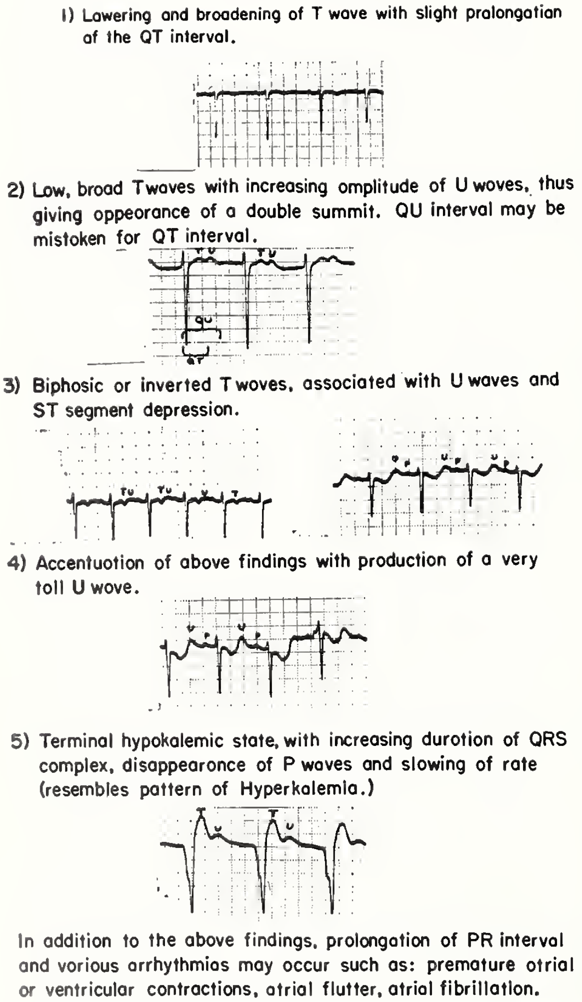
A number of mechanisms may be operative in a given instance of hypokalemia. For instance, in diabetic acidosis vomiting, excessive renal loss, cellular transfer and dilution of extracellular fluids may all play a role in the development of hypokalemia during treatment of diabetic acidosis. In this condition the total potassium deficit may be as high as 350 to 400 mEq.[6] The clinical manifestations of hypokalemia are not determined by the concentration of potassium in the serum alone. The concentration of potassium in the cellular compartment as well as the concentration of sodium and calcium are likewise important determinants of the presence or absence of clinical manifestations of hypokalemia. Early hypokalemia is manifested predominantly by muscle hypotonicity, but with more severe hypokalemia cardiac and central nervous system manifestations occur.[7] Renal manifestations occur after more prolonged hypokalemia.

Systemic Manifestations of Hypokalemia

1. General Muscle Hypotonicity:
Skeletal Muscle
(a) Weakness.
(b) Paralysis. Respiratory muscle paralysis may cause: (1) cyanosis, (2) "fish mouth" breathing, (3) death.
Smooth Muscle
(a) Paralytic ileus.
(b) Bladder atonicity.
2. Nervous System Depression:
Spinal Cord and Peripheral
(a) Decreased or absent deep tendon reflexes.
Brain
(a) Apathy.
(b) Lethargy.
(c) Disorientation.
(d) Confusion.
(e) Convulsions.
(f) Coma.
3. Gastrointestinal Symptoms:
(a) Nausea and vomiting.
(b) Obstipation (due to ileus).
4. Renal Tubular Damage:
(a) Hyposthenuria.
(b) Albuminuria.
(c) Polyuria. (Later oliguria may develop due to extensive vacuolar degeneration of tubular cells.)

The effects of hypokalemia on the kidney have been extensively studied by Schwartz.[8] The principle pathologic changes occur in the tubules with vacuolar degeneration[9] which is reversible if hypokalemia is corrected early. Progression to tubular necrosis may occur if the potassium deficient state is sufficiently prolonged.

The physiologic effects of potassium deficiency on the heart may result in any of several cardiac arrhythmias, including premature atrial or ventricular contractions, atrial flutter or atrial fibrillation. A sinus tachycardia is common and is frequently associated with cardiac dilatation, nonspecific systolic murmurs and an increased pulse pressure.[10] Electrocardiographic changes in hypokalemia are predominantly due to abnormalities in repolarization, although depolarization is also effected in far advanced hypokalemia.[11] The electrocardiographic manifestations of hypokalemia consist of depression of the ST segment, inversion of the T wave, prolongation of the Q-T interval and appearance of prominent U waves. The usual sequence in progressive potassium deficiency can be seen in figure 2.



1) Lowering and broadening of T wave with slight prolongation of the QT interval.

2) Low, broad T waves with increasing amplitude of U waves, thus giving appearance of a double summit. QU interval may be mistaken for QT interval.

3) Biphasic or inverted T waves, associated with U waves and ST segment depression.

4) Accentuation of above findings with production of a very tall U wave.

5) Terminal hypokalemic state, with increasing duration of QRS complex, disappearance of P waves and slowing of rate (resembles pattern of Hyperkalemia.)

In addition to the above findings, prolongation of PR interval and various arrhythmias may occur such as: premature atrial or ventricular contractions, atrial flutter, atrial fibrillation.

Fig. 2. Progressive electrocardiographic abnormalities associated with hypokalemia.

It is noteworthy that severe hypokalemia may cause prolongation of the QRS complex and disappearance of the P waves similar to the changes in hyperkalemia. The presence of a U wave helps to differentiate the two conditions. It should be noted that the electrocardiographic changes as well as the general manifestations are affected by concentrations of other electrolytes and the serum pH[14, 15] (e.g. hypernatremia augments the toxic effects of potassium deficiency, as does acidosis).

The therapy of hypokalemia is, of course, correction of the potassium deficit. Certain principles that should be kept in mind in treating hypokalemia include the following: (1) Hypokalemia is almost never an isolated entity. Repair of concomitant electrolyte abnormalities is necessary in addition to repair of the potassium deficit. (2) The greater the alteration in pH, the less accurately the serum potassium reflects moderate potassium depletion.[16] (3) Oral administration of potassium salts is preferable when feasible. Intravenous potassium requires close observation. (4) The dosage and rapidity of administration depends upon the severity of the deficit and the general condition of the patient. Usually not more than 20 mEq. per hour or 80 mEq. per liter of fluids is administered intravenously.[17]

When both hypokalemia and hyponatremia are present, potassium should be administered before or during replacement of sodium. Administration of potassium-free sodium solution under these circumstances may result in death of the patient.[18]

Serial electrocardiograms or even continuous electrocardiographic monitoring is a good method with which to follow a patient with marked hypokalemia and other electrolyte abnormalities. As the electrocardiogram reflects changes in the serum potassium rapidly, the tracing may return to normal during intravenous therapy and again reflect hypokalemia after the intravenous administration has been discontinued for 20 to 30 minutes. This indicates the rapid intracellular shift of potassium that may occur in patients with a severe potassium deficit.

HYPERKALEMIA

An abnormally high concentration of potassium in the serum may result from: (1) Transfer of potassium from intracellular to extracellular fluids. The transfer of only 2 per cent of the intracellular potassium would double the concentration in the extracellular fluids. This shift may occur in crush injuries, burns, hemolytic anemia or in severe dehydration and acute, severe hemorrhage. (2) Inadequate renal excretion as may occur in acute or chronic renal insufficiency or Addison's disease. (3) Inability of the cells to take up potassium, such as in untreated diabetic acidosis. (4) Rapid administration of potassium intravenously.

The last mechanism is of particular interest since a patient being treated with a rapid infusion of potassium intravenously may develop serious manifestations of hyperkalemia even though the total body potassium is below normal. This is because the manifestations of hyperkalemia are related to the concentration of potassium in the extracellular rather than intracellular fluid. For example, in diabetic acidosis prior to treatment, clinical and electrocardiographic findings of hyperkalemia may be present even though the total body potassium is low. Figure 3 shows electrocardiographic changes occurring in a patient being treated for hypokalemia with

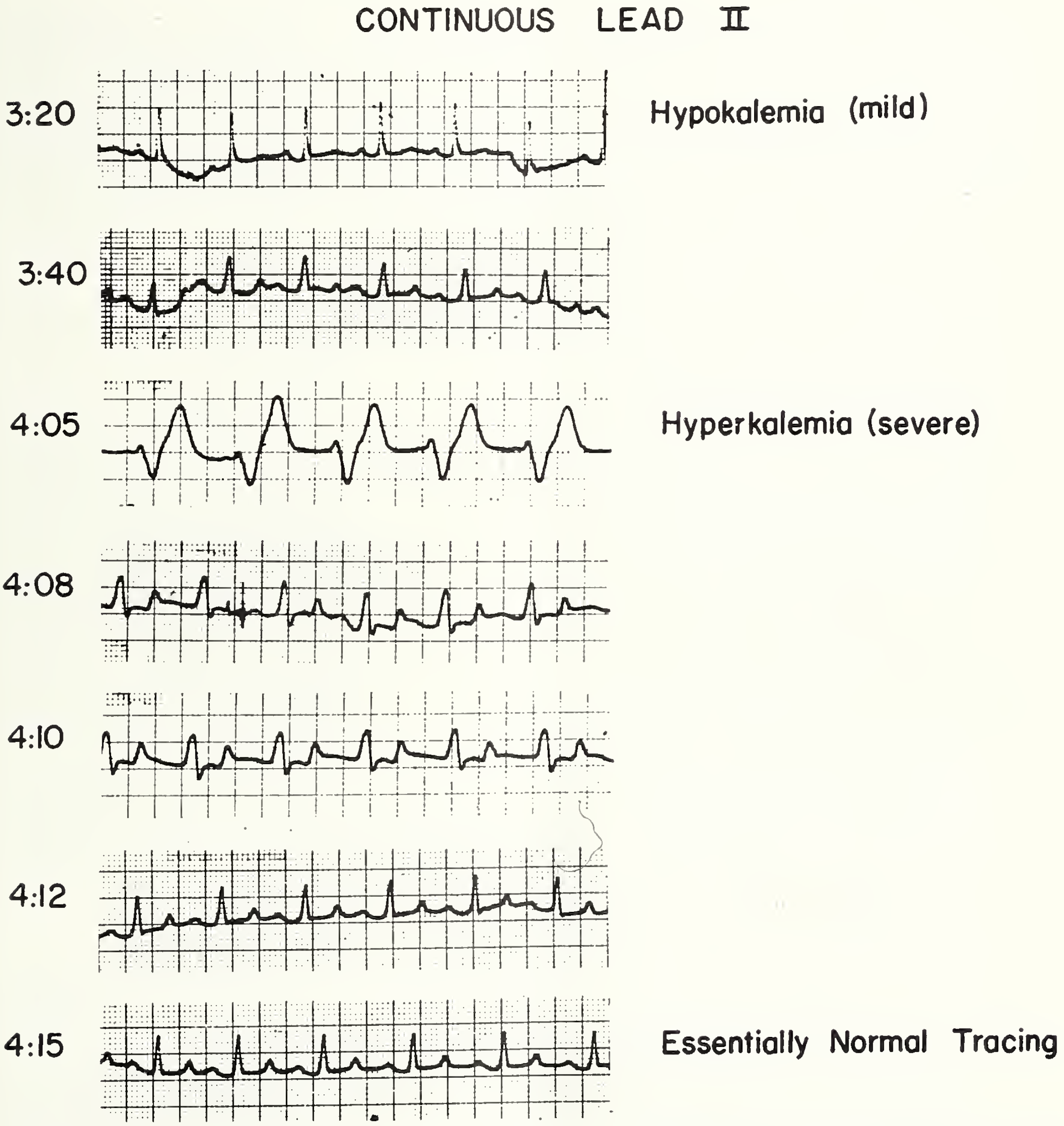


Fig. 3. Development of hyperkalemia during rapid infusion of potassium for hypokalemia. Electrocardiogram returns to normal when infusion is discontinued (4:05).

over zealous administration of potassium. The pattern of hyperkalemia disappeared with cessation of intravenous therapy.

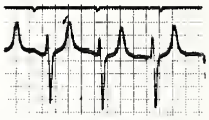
Acute renal failure is one of the most common causes of fatal hyperkalemia. In many cases, however, the renal changes are reversible (e.g. acute tubular necrosis due to crush injury, severe hemorrhage or transfusion reaction) providing the patient receives adequate medical therapy to maintain life during the period of tubular regeneration.

Unless the potassium intake is unusually high or cell destruction is extensive, hyperkalemia requires several days to develop, even though there is little or no urine output. An example of the latter condition occurs in patients who develop acute renal failure in the course of treatment for acute or chronic leukemia. Because of the massive destruction of cells, the uric acid may crystallize in the tubules and lead to marked oliguria. In the face of decreased urine excretion, the potassium from the destroyed cells accumulates rapidly in the serum and may lead to hyperkalemia and death in a matter of hours after the urine output is compromised. This was recently demonstrated in the case of a 16 year old Negro male who was admitted to the University of Missouri Medical Center with a diagnosis of acute lymphogenous leukemia. He was treated with large doses of Prednisone and 6-Mercaptopurine. In addition, sodium bicarbonate was administered daily in an attempt to keep the urine alkaline. On anti-leukemic therapy the patient's total leukocytes dropped from 120,000 to 2,000 per. cu. cm.[3] and there was marked regression of lymphadenopathy and splenomegaly. On the night of the twenty-fourth hospital day there was abrupt onset of oliguria, and the urine pH, which had been 7.5 on the previous day, was found to be 5.5. During the 24 hours after the onset of oliguria the patient progressed symptomatically from generalized weakness to quadriplegia associated with paresthesias of the mouth, hands and feet. The electrocardiogram showed signs of rapidly progressing hyperkalemia which did not respond to glucose and insulin, hypertonic saline, sodium lactate or calcium gluconate. He expired approximately 24 hours after the onset of oliguria. Shortly before death the serum potassium was 9.2 mEq/L and the uric acid 51.0 mg. per cent.

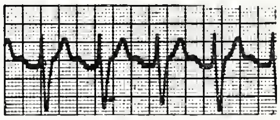
Systemic manifestations of hyperkalemia are similar to those of hypokalemia and consist of skeletal and smooth muscle hypotonicity with localized or generalized weakness or paralysis, decreased deep tendon reflexes, pallor, listlessness and mental confusion.[19] However, an important point in the differentiation from hypokalemia is the frequent association of paresthesias, particularly of the hands, feet and circumoral area. Occasionally in hyperkalemia, especially when treatment is instituted with high concentrations of sodium, increased muscle irritabilty and even tetanic convulsions will develop because of the effect of relative decrease in the calcium concentration. This can be readily corrected by addition of calcium salts to the therapeutic program.

Cardiovascular findings in hyperkalemia include progressive bradycardia as well as several ectopic rhythms which are thought to represent escape mechanisms caused by depression of normal conducting tissue.[20] These include atrial fibrillation, ventricular tachycardia and AV block. Depolarization, and consequently the QRS of the electrocardiogram, is more adversely affected in this condition than in hypokalemia.[11] The usual sequence of events is noted in figure

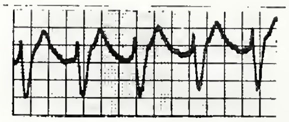
1) Tall, asymmetrical, peaked T waves. May be lower with a symmetrical "tent" configuration. Changes most marked in the precordial leads.



2) Prolongation of PR interval. P and R waves may show decreased amplitude. Periods of sinus arrest may occur.

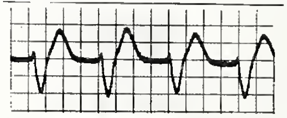


3) Wide, aberrant QRS complexes appear indicating increasing interventricular conduction disturbance. P waves disappear.



) Electrocardiographic: (continued)

4) Fusion of QRS and T complexes with depression, shortening and finally disappearance of ST segment producing a biphasic QRS-T deflection.



5) "Sine wave" pattern believed to represent ventricular flutter. Progresses to ventricular fibrillation or cardiac arrest as a terminal event.

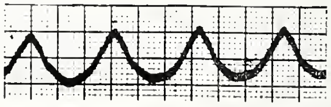


Fig. 4. Progressive electrocardiographic abnormalities associated with hyperkalemia.

4. These electrocardiographic changes are related more to the serum level than in hypokalemia but are still influenced by many factors including, as in hypokalemia, the concentration of other ions and the pH.[21] Severe hyponatremia may result in typical electrocardiographic changes of hyperkalemia even though the serum potassium is within normal limits (fig. 5).

Treatment of patients with hyperkalemia must be carried out rapidly when manifestations ap-

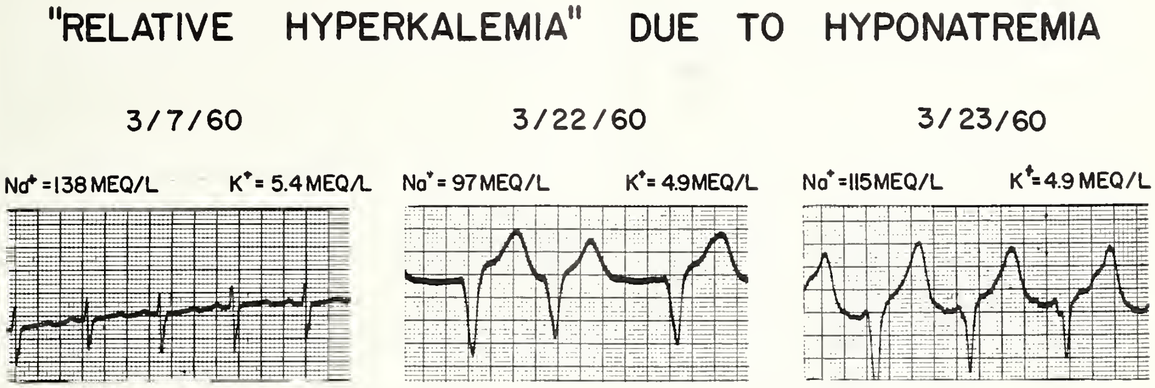

"RELATIVE HYPERKALEMIA" DUE TO HYPONATREMIA
3/7/60
3/22/60
3/23/60
Na+ =138 MEQ/L
K+ = 5.4 MEQ/L
Na+ = 97 MEQ/L
K+ = 4.9 MEQ/L
Na+ =115 MEQ/L
K+ = 4.9 MEQ/L

Fig. 5. Effect of severe hyponatremia in a patient with a normal serum potassium.

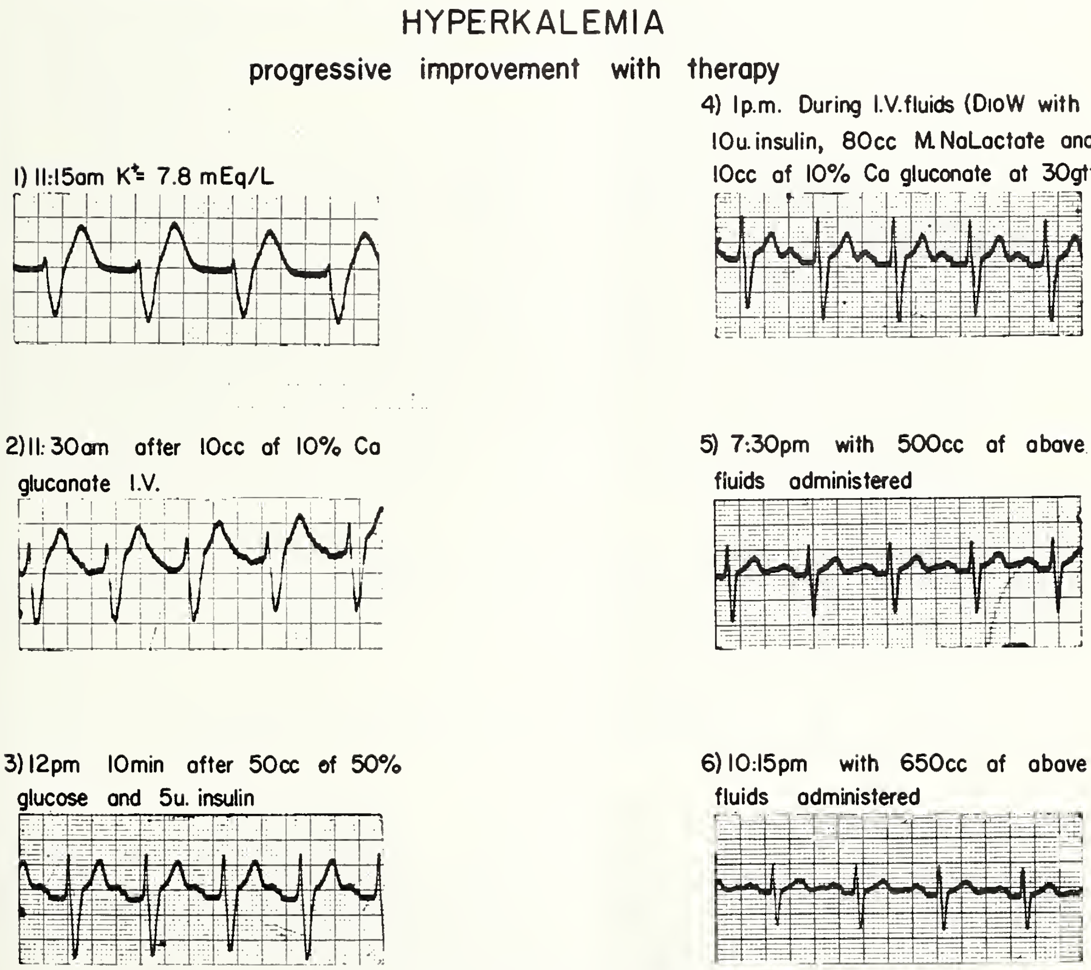

HYPERKALEMIA
progressive improvement with therapy
1) 11:15am K+= 7.8 mEq/L
2) 11:30am after 10cc of 10% Ca gluconate I.V.
3) 12pm 10min after 50cc of 50% glucose and 5u. insulin
4) 1p.m. During I.V. fluids (D10W with 10u. insulin, 80cc M. NaLactate and 10cc of 10% Ca gluconate at 30gtt/min)
5) 7:30pm with 500cc of above fluids administered
6) 10:15pm with 650cc of above fluids administered

Fig. 6. Treatment of hyperkalemia.

pear as the condition may then progress to termination in a short period of time. Extracorporeal dialysis with the artificial kidney has become the most effective way to reduce the serum potassium to normal levels within a few hours and can now be performed with a minimum of danger to the patient. However, the risk of transfusion reaction or of blood stream infection is still present. There are several other types of therapy which can be used and may result in a decrease in the serum potassium almost immediately.[21, 22, 23] With judicious care a patient in acute renal failure may be kept free of manifestations of hyperkalemia for several days either obviating the use of the artificial kidney or prolonging the interval between dialyses. Types of therapy usually employed and the rationale for their use are listed in table 1. It might be added that in a patient with hyperkalemia and a normal urine output, adrenal steroids may be of slight benefit by enhancing potassium excretion and sodium retention. Digitalis may partially counteract the effects of potassium on the heart.

Symptoms of hyperkalemia have never been proven to be related to an elevated intracellular potassium,[19, 24] and it is for this reason that therapy designed to displace potassium into the cells is of benefit. An example of fluid therapy employed and subsequent improvement in the electrocardiogram is noted in a patient who developed renal failure in the course of subacute bacterial endocarditis (fig. 6). The use of a hyper-

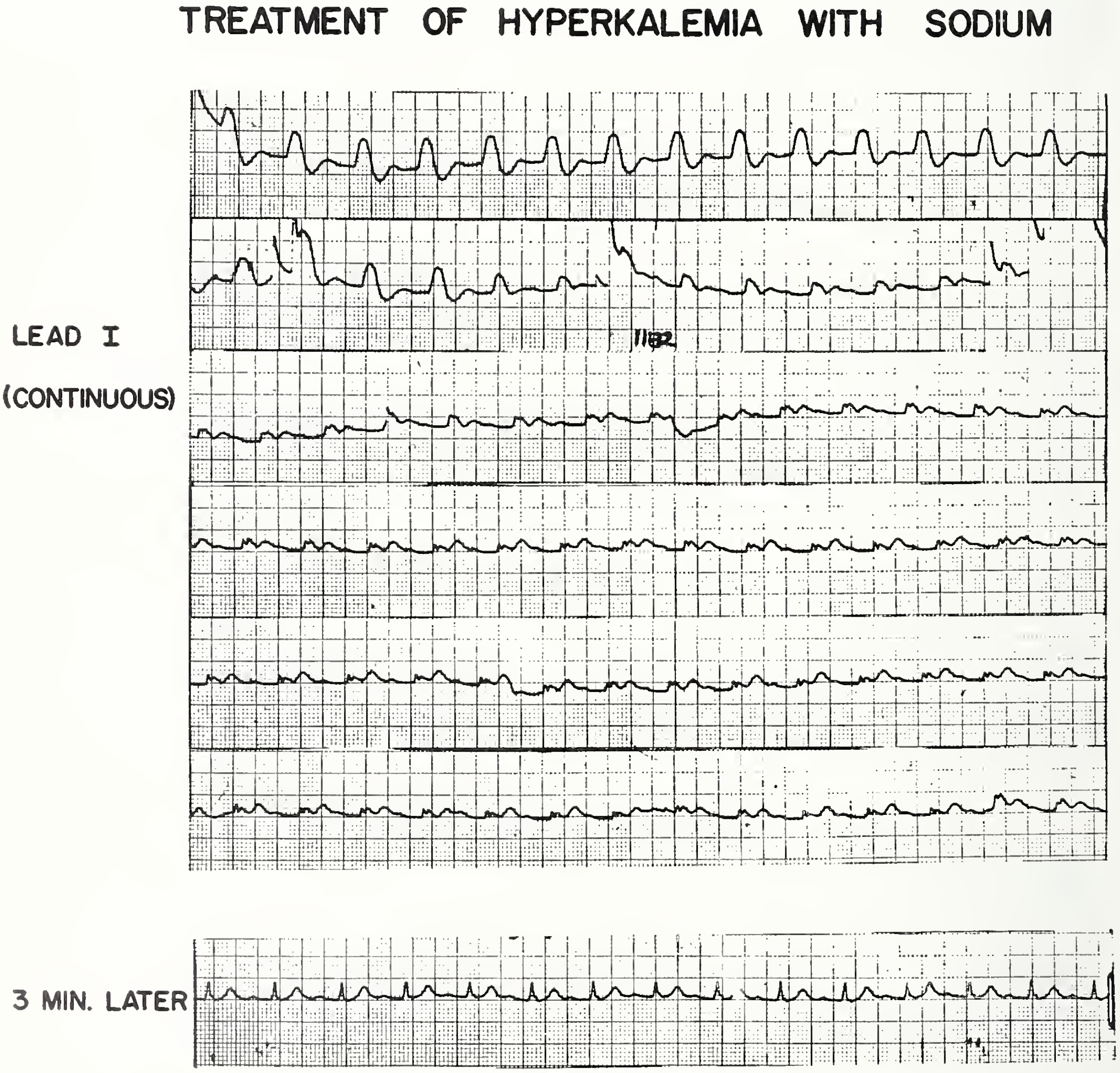


Fig. 7. Treatment of hyperkalemia with hypertonic sodium salts.

tonic alkaline sodium solution (i.e. Molar Sodium Lactate) has been one of the most effective modes of therapy when immediate action is necessary. The sodium is rapidly effective because of its multiple actions in hyperkalemia as noted in table 1. A preterminal electrocardiogram from hyperkalemia will sometimes revert to normal in a matter of minutes with this therapy (fig. 7). The amount administered is limited by the patient's cardiac status, and pulmonary edema may be the consequence of excessive amounts in the presence of cardiac decompensation. The administration of glucose and insulin is also rapidly effective, though care must be exercised not to administer a large amount of intravenous insulin in a non-diabetic patient. It is rarely necessary to use more than one unit of regular insulin to 4 to 5 grams of glucose. The amount of potassium entering the cell with glucose in man has been estimated to be approximately 1 millimole of glucose to 1 mEq. of potassium.[25]

TABLE 1

THERAPY OF HYPERKALEMIA

1. **Correct condition causing Hyperkalemia, if possible.**
2. **Infusion of glucose and insulin results in glycogen deposition with associated intracellular shift of K.**
3. **Infusion of hypertonic sodium salts causes:**
    - a) **Intracellular shift of K.**
    - b) **Increased excretion of K.**
    - c) **Expansion of blood volume with relative decrease in K concentration.**
    - d) **Physiologic antagonism of K.**
4. **Infusion of calcium salts may decrease toxicity of Hyperkalemia, as calcium is a physiologic antagonist of K.**
5. **Ion exchange resins exchange other cations (ammonium, sodium) for K.**
6. **Estrarenal dialysis:**
    - a) **Intestinal lavage.**
    - b) **Peritoneal lavage.**
    - c) **Artificial kidney.**

SUMMARY

The normal functions of potassium are briefly described and the relative concentrations of potassium in the intracellular and extracellular fluids are shown. The mechanisms and systemic and cardiovascular manifestations of hypokalemia and hyperkalemia are considered and briefly discussed. The importance of careful evaluation of clinical findings, serum potassium and electrocardiographic changes is pointed out. The serum concentration of potassium is not always the best indication of the patient's total body potassium, especially in hypokalemia. Because it reflects the effects of potassium on the heart and changes rapidly with variations in potassium level, the electrocardiogram is frequently of more value than the serum concentration in following the course of an acutely ill patient with a disorder of potassium metabolism. Therapy of hypokalemia consists of judicious administration of oral and/or intravenous potassium. Several types of therapy for hyperkalemia are mentioned, based primarily on removal of potassium from the body or displacement of serum potassium into the cells.

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Susceptibility and Immunity to Common Upper Respiratory Viral Infections —The Common Cold

Tuberculosis Abstract

Studies with volunteers show that many viruses are found in the nasal secretions of people suffering from the common cold and that physiologic and psychologic factors influence the symptoms. Infection causes immunity, but immunologic control may be difficult.

The abstract is furnished by the National Tuberculosis Association and is from an article by George Gee Jackson, M.D.; Harry F. Dowling, M.D.; Truman O. Anderson, M.D.; Louise Riff, B.S.; Jack Saporta, M.S., and Marvin Turck, M.D., which appeared in the Annals of Internal Medicine, October 1960.

Common upper respiratory viral infections, despite their frequency, have been something of an enigma to physicians and scientists in general. Little has been known about their specific etiology and the factors that influence susceptibility or resistance to infection. A prevalent view, even within recent years, has been that there is a common cold virus to which only man is susceptible and which causes recurrent symptomatic infections without establishing immunity of the host. This concept now appears to be far too simple.

The present report gives results of experimental challenge of volunteer subjects with one of the common cold agents under controlled conditions.

Donors with naturally acquired typical common colds in the months from September to May have contributed specimens of nasal secretion. The secretions have been filtered free of bacteria and cells and stored at minus 90° F.

Students ranging in age from 18 to 48 have been challenged with a nasal secretion, usually diluted 100 times; a virus grown in tissue culture, or a salt solution. Symptoms were recorded for each day of the following week.

Nasal discharge was the symptom most uniformly recorded. It was the only symptom that was rated as severe. Sore throat, malaise, postnasal discharge, headache, cough, and sputum were frequent symptoms of moderate severity. Feverishness and chilliness were reported infrequently.

Bacteria Cultured

Bacteriologic cultures of the nasal specimens before and on the fourth, seventh, and ninth days after challenge were made for the detection of pathogenic microorganisms in the respiratory secretions. Some of the volunteers harbored staphylococci, hemolytic streptococci, or pneumococci in their prechallenge specimens. There was no apparent relationship between the presenee of these microorganisms and the development of clinical symptoms.

Among a control group of volunteers who received uninfected buffer solution, there was a direct and statistically significant relationship between the usual number of colds per year reported by the subject and the likelihood of his developing symptoms of a cold in the experiment. Thus, among 23 subjects who reported five or more colds per year and who received the noninfectious control inoculum, 26 per cent developed a cold according to the criteria used in the experiments. Among the subjects who reported fewer natural colds and received uninfected material, there was a proportionately smaller number of experimental colds.

Attitudes exhibited before challenge showed that cold symptoms would be less likely to be reported by individuals who (1) did not believe they would develop a cold, (2) thought that emotional status did not influence physical status, and (3) reported feeling no concern or worry over anything going on in their lives at the time of experimental challenge. A positive response to these three attitudes made it more

(Continued on page 312)

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DON C. WEIR, M.D., ***St. Louis***

President's Inaugural Address

A Special Article

Fellow members of the St. Louis Medical Society, Guests and Ladies: One cannot stand is this position without experiencing mixed emotions. Perhaps the strongest emotion at the moment is one of deep humility. Humility born of inadequacy and responsibility to be selected to guide the helm of this, the largest medical society in the State of Missouri, is a sobering and maturing event. The second emotion is a strong feeling of pride—not only pride of position, but pride in the organization. The Society is celebrating its 125th anniversary and is the oldest medical organization west of the Mississippi River. It is by far the largest medical organization in the State of Missouri and one of the largest in the United States. It has no quota or numerical restrictions on membership. Race, religion nor color are considered in the membership evaluation. We extend a welcoming hand to all ethical practitioners of medicine in the metropolitan St. Louis area.

A vigorous, growing organization must look ahead. It should not be too concerned with living in the past or in trying to observe outmoded traditions. The rapidity with which our world is changing makes forward vision not only desirable but absolutely necessary for survival. What has the art and science of medicine done to meet the challenge of this new world?

The freer interchange of medical knowledge, brought about by rapid travel, increased exchange of medical documents, visiting lecturers, guest speakers, exchange professorships and the increasing merging of nationalities in joint scientific meetings is creating an atmosphere of respect and friendship between peoples of different racial backgrounds and different cultures. The greatest of all common denominators blends together practitioners of healing and that denominator is the patient. Modern medical men do not strive to have secret cures, secret medicines or patented technics. If ever there is a field of endeavor which should know no jealousies and which should strive for a common goal, it is the field of medicine.

The next few years will be critical ones for the medical profession; medical practice as we have known it in our lifetime will be drastically altered. It is important that we, as physicians, assume the responsibility as citizens in this democracy, to guide the changing pattern of medical practice into the channels which continue to have the single objective of better patient medical care. The physician must be the community leader in matters of health. Individual members of our profession and the society as a whole must take a more active part in the local, state and national governments, endeavoring to select qualified candidates for office, regardless of party affiliation, of such candidates. We must continue to work against socialistic, political control of medicine in America.

In the words of Dr. E. Vincent Askey, President of the A.M.A., "It is not enough that a doctor upgrade his knowledge, sharpen his skill, work endless hours in behalf of his patients, and provide leadership in the broad and highly technical field of medical practice, he must also demonstrate leadership in helping to retain the freedom of individual opportunity, the voluntary system of medical care and the high standards of that care which he has helped to build and to which he is dedicated to protect."

All of these are necessary for there are others who are incompetent but eager to assume leadership that will completely change the structure of medical practice.

We can and must further improve the quality of medical care and we must extend the best of medical services to the indigent and the aged, but this cannot be done by increasing taxes, or allotting indiscriminately greater and greater quantities of money for overlapping research.

Dr. Weir was installed as President of the St. Louis Medical Society on January 3, 1961, and presented this inaugural address at ceremonies held at the St. Louis Medical Society Building.

Dr. Weir is Professor of Clinical Radiology at St. Louis University School of Medicine.

It is ironic that at this moment when the caliber of medical care and practice in the United States is acknowledged to be the best in the whole world, that pressure is increasing for socialistic political control of medicine in America. The advances in medicine have been phenomenal during the last 50 years with the advent of chemotherapy, antibiotics, better understanding of chemical fluid balance, biochemistry, diet, endocrinology, new surgical technics and better understanding of mental disease. The life expectancy has increased from 49 to 68 years; the death rate from tuberculosis has dropped from 194 to 9 per 100,000; infant mortality fell from 100 to 26 per 1,000 live births. Also, American children today are taller and healthier and have a lower death rate than ever before. Few professions can list equal accomplishments during this period, but we cannot and will not be satified with past achievements. The future holds many challenges, principally in the field of cardiovascular disease, mental disease, problems of aging, chronic ailments and cancer.

Medicine has increased life expectancy by nearly 20 years during the last half century, but business and industry have not modified arbitrary lines which were established at the turn of the century. The magic number of 40 years means middle age and the distressing one of 65 means old age. Prime Minister Bismark of Germany in 1880 established the age of 65 as the standard for retirement when his first social insurance program set 65 as the age of eligibility for certain government benefits. We, like sheep, have followed this recommendation for the last eighty years. These figures are unrealistic, outmoded and archaic. As physicians we are cognizant of the fact that numerical years do not determine mental and physical standards. The business and labor leaders have a problem, which needs a solution to help the elderly continue a happy, useful, constructive life in our society after the arbitrary age of 65 years. The "ailments of idleness" cannot be corrected by the medical profession.

It is fitting that the medical profession should provide the leadership so necessary in the development of medical care programs for the aging because medicine and its related fields are largely responsible for the nation's expanding longevity. The problem of health care for some of the older age groups is one that must be solved. The answer is not apparent at this time, but we should not embark upon a "quick solution" stimulated by recent political controversy during the last national election. Problems of the aged are multifold and how to pay for their health care represents only one ramification of a very complex problem.

I believe the statement by Right Reverend Monsignor A. C. Dalton, Director of Catholic Hospitals of the Archdiocese of Boston, before the McNamara Committee, is very apropos, and I quote: "From all I have observed, heard or read, it is my opinion that the problem of our aged citizens is an overexaggerated one. Reliable authorities appear to be unanimous in stating that the vast majority of those 65 and over present no special problems; they can handle their own situations well or have them handled satisfactorily by those near and dear to them.

"It is with regard to the minority that any problem exists. Public interest focuses upon this minority all out of proportion. A quick solution, and an easy one is to hand the problem over to the government but the state can never give to the aged warmth, appreciation and tender care."

I would like to say a few words about medical fees which have been the center of continuous controversy since the time of Hippocrates, but I believe the philosophy of medicine is well expressed in the Principles of Medical Ethics of the American Medical Association, and I quote: "The Prime Object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration." The American Medical Association advocates also in the Principles of Medical Ethics that a doctor's fee, "should be commensurate with services rendered and the patient's ability to pay." This code is still applicable and should not be compromised.

However, medical care costs are a major source of misunderstanding in the patient-physician relationship. Every physician has the responsibility of eliminating fee misunderstandings by fully explaining medical costs. He also has the responsibility to help patients cut medical costs when this is possible.

A frank discussion of fees in advance with the patient will eliminate misconceptions about overcharging and fee frictions. Most patients are inclined to combine medical fees with total medical costs, including drugs and hospital charges. It has been shown, in a recent survey by the U. S. Department of Commerce that "the physicians' share of the medical care dollar represents only twenty-five cents of every dollar spent." The doctor can avoid misunderstanding by giving the patient an idea of what the entire medical procedure will cost. Most patients do not object to fair, understandable charges. They do object to unexplained, unexpected charges.

In addition to an advance explanation of fees, the doctor should help the patient cut their medical costs. This can be done by reducing office visits, performing expensive tests only as necessary, hospitalization of patients only when necessary and prescribing low cost drugs rather than high cost items whenever possible and only in quantities needed.

The prime object of the medical profession is to serve humanity, regardless of reward or financial gain. Since time immemorial, doctors have given professional advice to the indigent without compensation. No person with a legitimate need for doctors' services need forego that call because of inability to pay.

The medical profession has traditionally taken care of those who cannot pay. They do not have a sign in the office or carry advertisements in the newspapers to publicize their program but the public is aware or should be aware of the medical profession's efforts to aid all in need. Some people mistakingly believe that doctor's care is not available unless it is paid for but according to the code of ethics a doctor is honor bound to give free care to those in need or without adequate finances.

In a nationwide survey of private practitioners of medicine by the journal, *New Medical Materia*, it was revealed that the free medical care donated by physicians in the United States totaled the amazing sum of 658 million dollars per year. The sum far exceeds the federal-state program of medical care for the elderly recently legislated by Congress.

It was also revealed that 60 per cent of all doctors devote 10 per cent or more of their working hours to charity. Specialists donate an average of $4,812.00 each year and the general practitioner an average of $3,360.00. These professional services are donated without compulsion and without seeking public applause.

It has been the policy of the St. Louis Medical Society to guarantee the services of a physician to all, regardless of ability to pay. This has been the procedure since the Society's organization and this policy is still in force. One hears a great deal of "loose talk" about individuals going without needed medical care but if the facts were presented to the Society we can assure them that the professional aid will be forthcoming. I have never personally met a physician who would not donate his services either whole or in part if needed. It has been the policy of physicians throughout the years to give unselfishly of their time and medical skill at reduced rates and at no charge to indigent patients.

In the last 50 years there have been great medical reforms and advances in medical education. The Flexner report in 1910 paved the way for elimination of proprietary medical schools and the raising of medical educational standards. The number of eligible medical school student applicants far exceeded the openings available. Now the pendulum seems to be swinging in the other direction.

There is a shortage of teaching personnel and clinical facilities. There has been a sharp and serious decline in the quality and number of applicants for medical schools. Medicine once attracted a high proportion of honor students. Now careers in architecture, engineering, electronics, physics, chemistry and nuclear science have greater appeal and are attracting an increasing number of these qualified students.

The number of students who applied for admission to medical schools last fall decreased to 1.8 times the freshman capacity which is the lowest ratio in 20 years. The declining quality of applicants in indicated by their academic record in premedical and medical schools. In 1951, applications for admission to medical schools included 40 per cent straight A students; 43 per cent B, and 17 per cent C students. In 1958 there was a precipitous drop in A students to 16 per cent, B students increased to 70 per cent while C students decreased to 14 per cent. This alteration in the quality of applicants is reflected in their subsequent academic record in medical schools. In 1958 approximately 8 per cent of the freshman medical students withdrew because of poor grades or for other reasons which is about 50 per cent increase from the 5.5 per cent in 1955. Medical school enrollment has expanded about 50 per cent in the last 10 years but over this same period the number of applicants for admission to medical schools has declined by one third. Although a few qualified applicants may be unable in a given year to gain admission to any school simply because of lack of space, the number of such applicants is very small. Thus, where there are more applicants than places, many schools are having serious difficulty in filling their first year places with well qualified students. A major problem facing the U. S. medical schools in their bid for talent is the problem of insuring that those quality students who each year do express an interest in a career in medicine are not turned away due to problems of distribution among the schools. To reach the goal of 11,000 graduates in 1971 the number of able students must be substantially increased. The decrease in medical school applicants is the result of multifold factors. There are now more careers in other sciences which offer equal community respect, such as nuclear energy and electronics. These fields are extremely well paid, the period of study is shorter and these fields offer more scholarships, grants and part-time jobs than medicine.

The medical career is long and expensive and this discourages applicants. Four years of medical school requires about $11,600. It usually requires an average of nine years of education and training to produce a general practitioner; 13 years to be a general surgeon; 13 years to become a radiologist, and 15 years to become a thoracic surgeon. This training period includes eight years of college and medical school plus a year's internship and residency training is insufficient to supin hospitals. The stipend for the period of internship and residency training is in sufficient to support a married physician and at best they are 27 to 30 years of age before they complete their training and begin to support a family. In contrast, the average time for a student in acquiring a Ph.D. degree in chemistry, engineering or mathematics is 7.5 to 7.8 years.

Numerous corrective measures have been proposed. Among the most important are shortening of the curriculum, including abbreviation of premedical and medical education, elimination of the internship, active recruitment, a longer academic year and earlier acceptance of students.

All of these proposals merit serious consideration, but the one most immediately available for action is the active recruitment. Several medical schools are inviting students who express interest in medicine to visit the campus and become acquainted with the teaching program and faculty. The University of Michigan Medical School recently inaugurated research projects for undergraduates. Some students are doing heart research on dogs and others utilize rats to study the effects of various drugs on the nervous system. All of these projects are being initiated to maintain the interest of premedical students in medicine.

The A.M.A. and the Association of American Medical Colleges are preparing a booklet, "Medicine as a Career" in an attempt to attract students. They have also completed a 30 minute color motion picture entitled, "I Am a Doctor" at the cost of $36,000, to be loaned to high schools for student career work.

The A.M.A. Council on Medical Education has prepared a plan for creation of fifty medical school scholarships designed to alleviate in part the financial difficulties of medical students and encourage career decision in favor of medicine. These scholarships are to be awarded to deserving medical school students and consist of $1,000 per year for four years. Medical schools are also increasing the amount of student aid and scholarship assistance. Our own Missouri State Medical Association has established a $50,000 loan fund for medical students who are residents of Missouri. This fund is already in action and about 60 per cent has been placed on loan. The remaining money is "earmarked" for the second semester of school. This is a noble but undernourished fund.

The nation's increasing need for physicians stems from a number of causes, mainly population growth, changing age brackets, increasing use of medical services and changing pattern of service. According to the Public Health Service the population of the United States will reach 235 million by 1975 if present fertility and mortality patterns continue. This will result in a decrease in the ratio of physicians in practice unless the number of medical graduates is increased from the present approximately 7,000 to 11,000 per year. Thus, the field of medicine is not only facing a decline in quality medical applicants but the total number of worthy applicants must be increased.

In recent years there has been a significant increase in the efficiency of the physician. The average work week for a physician is about 60 hours, but the substitution of office for home visits, increased use of hospitals, greater utilization of paramedical personnel and urbanization of the population have increased the capacity of the individual physician. However, this increased efficiency is limited for personalized medical care must be preserved.

The ever-increasing need for more physicians makes it imperative that some method be found to shorten the number of years necessary for study without decreasing the quality of medical education, increasing the number of worthy and interested medical school applicants and decreasing the cost of a career in medicine by increased financial aid through scholarships and grants. If the solution to these problems is not forthcoming then the high caliber of the medical practice as known in the United States is bound to suffer.

However,* we must remember that ivory towers, tall buildings and all of our modern equipment cannot make a robot into a physician

(Continued on page 236)

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* Flocks, R. H.: "Is the Horse and Buggy Doctor Still With Us?" Delivered before the University of Iowa Premedical students.

WILLIAM C. ALLEN, M.D., ***Jefferson City***

School Personnel and the Onset of Menstruation

A Special Article

Does it make any difference to an adolescent girl if she knows something about menstruation before her menarche? How do girls react if they have their first menstrual period while in school? How do teachers manage such situations? Do school personnel think education about menstruation is a good idea and, if so, who should do it? How do parents react to the schools giving information to children about the menstrual function? In what grade should menstrual information be given? Is there any correlation between social class and information about menses and reaction to menstruation?

These all seem relatively simple questions, the answers to which might well be easily available, but a search of the medical literature furnished little information to answer any of them. The present study was designed as a pilot to find out the problems of getting information and to give leads for further investigation.

Subjects of the Study

Time was not sufficient to hope to interview the children themselves, but it was possible to arrange structured interviews with faculty personnel teaching 1,517 girls in the sixth and seventh grades of a public school system in a city in the eastern United States. The respondents comprised five classroom teachers, four school nurses, four physical education teachers, two counselors and one vice principal. This group was selected only because its members spend a good deal of time with pupils and they would be people to whom a student might turn for advice on a personal subject. The respondents varied in experience markedly. Excluding the nurses, the experience teaching sixth grade girls ranged from three to 38 years, with the average being 19.2 years. The school nurses were somewhat less experienced, ranging from one half to nine years, the average being 3.9. In age, the group ranged from 22 to 62, the average being 44.3.

A pilot study made in an eastern city's school system on the relationship of school personnel and circumstances involved in the onset of menstruation is reported. The investigation was done as a part of a course in Mental Hygiene in the School of Hygiene and Public Health, The Johns Hopkins University, in 1959-1960.

Dr. Allen is Consultant in Chronic Diseases with the Division of Health of Missouri.

The schools in which these people worked were selected to represent geographic areas of widely differing socio-economic status. In the high socio-economic area, in which the schools served 586 girls, incomes were estimated to be $8,000 per annum and upward. In the lower economic areas, family income was probably below $5,000; the number of girls from these areas, represented by their faculty members, was 931. The income estimates were made by a member of the Department of Education. Principals of the schools concerned and respondents gave concurring estimates.

Girls in the sixth and seventh grades, unless school progress has been unusual in some way, range from 11½ to 13½ years of age. In the group represented here, the range was actually from

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PRESIDENT'S ADDRESS—Continued

for his role is a peculiar combination of science, art and humanness. He is a teacher, a counsellor and a healer, all combined. In fact, one of the dangers we must avoid in the practice of medicine today is that of forgetting that the practice of medicine is more than a science, that it is a unique art, and a very personal and intimate one.

Thank you and I wish all of you a healthy, happy New Year.

10½ to 15 years with the largest number being between 11 and 13, as age is colloquially expressed. In many school systems the sixth represents the last elementary school grade and teaching is mostly done by one teacher. The seventh grade is the first of junior high school and here teaching is more specialized. For the most part, no one teacher spends as large an amount of time with pupils as is the case in the earlier grades. This type of school organization prevailed where this study was done. The age range of the girls includes the years when the onset of menstruation is most likely to appear for the first time and, of course, this is the reason these grades were chosen.

INTERVIEW SCHEDULE

In addition to the material on faculty experience already summarized, the respondents were asked to tell their experiences with girls menstruating for the first time during schools hours and their impression as to whether they thought the girls had had any premenstrual education. They were also asked how they handled these situations if they had encountered any. The faculty members were asked to estimate the number of girls in their classes who had already begun to menstruate, the number who had information about the function before it began, and where they thought the girls got their information.

The faculty members were also asked to give their impression on the prevalence and severity of dysmenorrhea at the present time as compared to ten years ago; similarly they were asked whether they thought the age at menarche has shown any tendency to change.

They were also asked to give their own menstrual histories as to age at onset, premenstrual information and its source and the severity of dysmenorrhea, if any.

Finally, they were asked their opinion about whether premenstrual education should be given through the school system and, if so, at what grade level it should be included.

RESULTS

Faculty personnel for sixth grade girls reported that menarche had occurred 17 times in their experience which represented 70.5 years of teaching experience. In the seventh grade, the respondents had been faced with this situation 111 times in an accumulated experience of 114 years. Assuming that the informants were able to report accurately, it would appear that a seventh grade teacher may expect to deal with menarche during school hours approximately once a year, a sixth grade teacher somewhat less often.

The respondents reported that in many of the instances the girl was unprepared to deal with the period and the contact with the teacher was to ask for equipment or for permission to go home to change clothes. Most of the girls had prior knowledge about menstruation, but the faculty mentioned seven of the 128 instances in which this had not been the case. In five of these seven, the girls were described as very frightened, even panicky, while in two cases the fear was less acute. In all seven, however, the girls were emotionally upset to such an extent that the faculty member felt any educational effort then, indeed much conversation at all, was quite futile so that in each case the parent was contacted and requested to take the child home.

The 121 girls who had prior information concerning menstruation were reported as much less upset. They announced they were menstruating, asked for a pad, or asked to go home because the period had started. Rarely, they asked about the function and when they did, the procedure was to suggest they bring a note of permission from home and that when this was received, the respondent would discuss menstruation with them.

All schools studied made a practice of having sanitary napkins and pins available, either from the teachers or from the nurse or both. In one school, dispensers had been installed in the toilets.

PROPORTION OF GIRLS MENSTRUATING AND AGE AT MENARCHE

Twenty-six per cent of the sixth grade girls were reported as menstruating by respondents by the middle of the academic year. At the same time of year, 60 per cent of seventh grade girls were said to have begun the function and in one class group of 130 girls ranging from 12½ to 15 years, every girl was reported to be past the menarche. Junior high faculty members were able to offer information about eighth and ninth grade girls. They estimated that by the end of the eighth grade almost all (99 per cent) girls were menstruating, and that by the ninth all were.

The faculty members reported their own ages at menarche, the range being 9 to 14, with an average age of 12.2 years. While this is earlier than most reports in the literature, it should be recognized that the sample is small and by no means typical of the population at large. Nevertheless, one quarter of the informants thought that girls today menstruated earlier than they did even 10 years ago; the rest thought there had been no change.

EXTENT OF PREMENSTRUAL EDUCATION

Faculty members reported a difference in the extent of premenstrual education among girls of the different socio-economic areas. Ninety per cent of the group attending schools in the less-advantaged area were reported to know something about menstruation before it occurred. Twenty-five per cent of girls coming from the higher socio-economic areas were estimated to be uninformed about the function.

In the less-privileged group, information was thought to have come, usually, through observation of the mother or older girls, or from conversation with sisters and other girls. It appeared rare that these girls received direct premenstrual education from their mothers. Girls of the higher socio-economic class were reported, in contrast, to have received direct premenstrual education from their mothers or through the school program, or from both. It is important to note that the faculty groups reporting on the girls from the two socio-economic classes were made up of different individuals.

DYSMENORRHEA

Painful menstruation was reported as rare by all respondents except one, for both grade-age groups and for both socio-economic categories. If it occurred at all, it was mild and necessitated no limitation of activity or of participation in school functions, including physical education. Absenteeism because of menstruation was also reported to be rare, in the neighborhood of 2 to 3 per cent, and generally was for a single day. There was no reported difference by socio-economic origin. The informants suspected that dysmenorrhea was sometimes a convenient excuse for absence rather than a cause of it.

There were a number of sixth grade girls who brought notes from their mothers requesting that the child be excused from physical education classes for a day. These were honored, although the pupils would often be observed playing quite normally during recess periods. Excuses were more commonly received from mothers of girls from the low economic areas as compared with the higher economic group.

In the seventh grade, where physical education is a more formal class-type procedure, all girls were required to dress in gym uniforms whether or not they were to take part in full activity. Since this rule has been in effect, most girls take part in full activity, whether or not they are menstruating. Where showers were available, menstruating girls were excused from taking showers for the first two days of the period, although they were informed they could shower at home. Physical education instructors kept menstrual records on the girls in their classes.

Faculty members generally reported that they believed dysmenorrhea to be less common than it was 10 or more years ago. The danger of placing too much confidence in the findings of studies such as this one, which are based on reports of experience rather than on case by case records and direct report of the person involved, is well illustrated by an incident concerning dysmenorrhea. A single faculty member reported that she felt dysmenorrhea was quite common and that it and school absenteeism because of it were definitely increasing. Her colleagues in the same school disagreed with her estimates and records showed her estimate of absenteeism to be incorrect. This woman herself suffered from dysmenorrhea and she displayed a sympathetic attitude toward anyone who also had it. Students who went to her and reported they were having menstrual cramps were given an analgesic and put to bed with a hot water bottle on the abdomen, spending a morning so. On the other hand, another instructor who had dysmenorrhea took the attitude that menstruation is a normal physiologic function and that, even though menstruating, the pupils should follow the rule and dress for gym, although they might be excused from vigorous exercises on request. Many of the girls were reported to carry a proprietary analgesic drug.

PREMENSTRUAL EDUCATION IN THE SCHOOL

The schools in the study attended by children from middle and upper socio-economic areas offered programs in premenstrual education; no school drawing its pupils from the poorer areas did. Such education is not unusual in the city in which the study was carried out, although 88 per cent of the respondent faculty thought premenstrual education should be given; the others gave a qualified "no." They said that ideally premenstrual education should be given by the mothers in the home, but they did not object to school instruction if done by a well-qualified individual whom the girls already know, such as the school nurse or other qualified person. All faculty members agreed that a well-qualified person was required for this type of instruction and most selected the nurse as the most logical person to give the instruction. Two respondents selected the seventh grade as most suitable for such instruction, 10 the sixth grade, while four believed the material should be taught in the fifth grade. It appeared that seventh grade teachers believed the sixth to be the locus of choice, while all those stating that premenstrual instruction should come in the fifth grade were sixth grade instructors.

The opportunity arose to discuss the methods used in premenstrual education where it was in effect and to observe one educational session. The instruction to sixth graders in the group of schools observed was given by school nurses; the seventh grades were taught either by school nurses or physical education teachers. Instruction is usually given in a single session and is built around one of the several films available; the film is preceded by a brief introduction and followed by a question-answer discussion period. In one school there was a separate session with similar content for boys in the class.

In preparation for the class, parents were informed of the content and nature of the program, and their written permission for the child to take part was obtained. The parents were invited to attend if they desired. No parents refused to let their children take part during the two years of experience accumulated before this study was done. At the session itself, after the children left, an opportunity was arranged for the author to discuss the program with the mothers in the absence of school personnel. Urged to express frank opinions, they were unanimous in saying the program should be given and that both mothers and daughters should attend whenever possible. One mother said, "This is wonderful. Often I have tried to bring up the subject, but this program breaks the ice. Now we can discuss the subject through the joint sharing of this program." The mothers in general thought the program might better be placed at the close of the fifth grade years.

SUMMARY AND CONCLUSIONS

The nature and brevity of this study makes it quite impossible to draw any firm conclusions from it. This is primarily a report rather than research.

If any conclusion may be drawn, it is that menarche, when it occurs in school and without prior knowledge of menstruation, is likely to be a frightening experience for the girl concerned. Presumably this situation could be avoided by premenstrual education and this is a strong argument for such education.

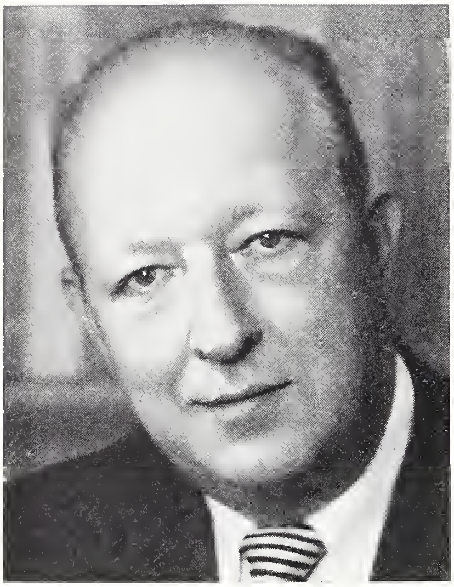
Menarche during school hours appears to be rather rare, so far as faculty members are aware. Although rather large percentages of girls appear to faculty members to have knowledge of menstruation before menarche, this information is usually superficial and meager. Dysmenorrhea is not a problem of any magnitude now, and teachers in this group felt it less so than a decade ago.

In the schools studied in this pilot research, premenstrual education occurred only in those serving the higher socio-economic groups. The teachers agreed that such education should be widespread but were careful to state that the instructor must be well qualified and a person already known to the pupils.

ACKNOWLEDGMENTS

The author is deeply grateful to the school system in which this study was done and regrets that it cannot be directly named.

It was indeed a rare privilege for the author to learn from and work with Dr. Paul Lemkau, Professor of Public Health Administration, Division of Mental Hygiene, School of Hygiene and Public Health, The Johns Hopkins University, and the author is greatly indebted to Dr. Lemkau for his advice and especially for editing this paper.



R. O. Muether, M.D.

President's Message

March 19, 20, 21, 22, the 103rd Annual Session! The Committee on Scientific and Postgraduate Work, the committee which plans the program for the Annual Session, has prepared a program based on what members said they wanted, through a questionnaire to all members soon after the last Annual Session. An unusually good return was made on the questionnaires, both from members who had attended and those who had not. Those who attended told what they liked best, what they wanted more of and what they wished less of. Those who did not attend told what type of program would attract them. The program committee has carried out faithfully what was requested—and there is an excellent and varied program offered.

Scientific and related instruction, fellowship—and policy making for the Association—will fill the time of the shortened session to the fullest. We, as physicians, do wish instruction in our work; we do, for the most part, enjoy the fellowship of being together, and certainly the trends in Washington today make it very clear that each voice should make itself heard in the formation of policies of the Association.

I sincerely hope that your plans include attendance at the 103rd Annual Session of the Association, March 19, 20, 21, 22, Hotel Muehlebach, Kansas City.

R. O. Muether M.D.

EDITORIALS

THE MONTH OF MARCH

Several states joined the union in the month of March—Ohio in 1803, Nebraska in 1867, Florida in 1845, Vermont in 1791, Maine in 1820.

But to members of the Missouri State Medical Association March 1961 will mark the date of the 103rd Annual Session of the Association, to be held at Hotel Muehlebach, Kansas City, from March 19 to 22.

The United States Department of Education was established in March 1867. And there will be plenty of medical education at the 1961 Annual Session of the Association.

The first United States Census was taken in March of 1790. Will you be numbered in the census of those attending the 1961 Annual Session of the Association?

"The Star Spangled Banner" was decreed the National Anthem by Congress in March 1931. The Annual Session of the Association is not a political meeting where the National Anthem will be used, at least extensively, but it will be a session at which a great deal of legislation and government activities will, and should be, discussed by members of the Association. At several times in the history of the Association is seemed that more drastic times, politically, could not exist, in decisions needed concerning the future of the practice of medicine, but whether or not it seems more drastic because it is closer, it is definitely drastic and the considered opinion of members is needed to direct the activities of the Association, and through it, those of organized medicine.

The first U. S. postage stamps came into use in March of 1847, but in 1961 members of the Association making reservations for special events at the Annual Session can do so in a postage-paid envelope and do not need take advantage of this long standing law. Note that the reservation orders should be sent in prior to March 10 in order to be handled. Tickets for all events will be available at the session but making them ahead of time will save the trouble of standing in line for them there.

The telephone was first used in March of 1876, which is a reminder that if reservations have not been made at Hotel Muehlebach for the session, a telephone call will take care of it.

The Federal Trade Commission was organized in March 1915—and more bureaucracy is looming in government circles in this March of 1961—at least some that would not be to the liking of practicing physicians. The House of Delegates of the Association is a good place to present any ideas that you may have to help preserve private enterprise, including the private practice of medicine, and to obtain information about what the individual might do and what organized medicine can do.

A wonderful vantage point for watching the arrival of spring on March 21, would be at the Annual Session.

A schedule of events, the scientific program, special events and delegates that have been elected appear in this issue of Missouri Medicine.

THE BLUE SHIELD PLANS

Physicians are continuing to provide leadership and guidance for Missouri's Blue Shield plans, according to a recent survey of the two medical-surgical plans which serve residents in all parts of the state.

Of 49 business and professional people currently serving on the governing boards of Missouri Medical Service, Inc. (St. Louis Blue Shield) and Surgical Care, Inc. (Kansas City Blue Shield), 32 are doctors of medicine—or roughly two thirds of each board.

The ratio of physicians to men in other businesses and professions on the two governing boards typifies that reported by the 68 Blue Shield plans operating throughout the United States. Nationally, of a total board membership for all plans of 1,330 persons, 905 were representatives of the medical profession—or 68 per cent. Practically all plans said that at least 50 per cent of their governing boards are physicians.

All officers and trustees of the Kansas City and St. Louis Blue Shield plans serve voluntarily and without compensation as a service to their communities.

Physicians on the St. Louis Blue Shield board of trustees are Drs. Henry C. Allen, Leonard T. Furlow, Theodore H. Hanser, Leo J. Hartnett, Maurice J. Lonsway, R. O. Muether, James P. Murphy, Llewellyn Sale, Sr., T. E. Sanders, Jerome I. Simon and Carl F. Vohs, St. Louis.

Also Drs. Ben M. Bull, Ironton; W. F. Francka, Hannibal; Walter S. Sewell, Springfield; Byron M. Stuart, Boonville, and J. H. Summers, Lebanon, serve on the board.

St. Louis Blue Shield officers for 1960-1961 are:

(Continued on page 242)

News—Personal and Professional

Recently elected officers of the Independence Sanitarium and Hospital, Independence, are Drs. **Richard G. Pugh**, president; **E. L. Sanders**, president-elect; **S. F. Cockrell**, secretary-treasurer; **Charles E. Nickson, Jr.**, head of the medical department, and **J. H. Nesselrode**, head of the surgical department.

Speaker at a meeting of the Western Missouri Chapter of the American Physical Therapy Association in Kansas City on January 10 was **Ruth M. Lapi**, M.D., Kansas City. She spoke on "Psychiatric Aspects of Physical Therapy."

Speaker at the twelfth annual Dr. F. G. Thompson Memorial Lecture on May 18 at the Thompson, Brumm & Knepper Clinic, St. Joseph, will be O. T. Clagett, M.D., Mayo Clinic, who will speak on "Treatment of Carcinoma of the Breast: A Controversial Subject."

"Your Child's Physical Health" was the subject of a panel discussion at a meeting of the Lockwood School PTA, Webster Groves, in which **Peter G. Danis**, M.D., St. Louis, took part.

Moderator of a symposium on the metabolism and biochemical functions of iron presented at a meeting of the Washington University Medical Society in January was **Carl V. Moore**, M.D., St. Louis.

New chairman of the Medical Council of the Metropolitan Area of Greater Kansas City is **John F. Bowser**, M.D., Kansas City.

"Hypnosis" was the subject of a talk given by **Melvin M. Schwartz**, M.D., St. Louis, before a meeting of the Oakville School PTA in January.

At a January meeting of the American Association of Nurse Anesthetists in St. Louis, **Hugh E. Stephenson, Jr.**, M.D., Columbia, spoke on "Cardiac Arrest and Resuscitation."

The Central Missouri Medical Assistants' Society had as speaker at their January meeting in Moberly, **C. C. Cohrs**, M.D., Moberly. He discussed various phases of allergies.

Recently named Knights of St. Gregory, a papal honor society, were **David B. Flavin, M.D.**, St. Louis, and **Christopher J. Vournas**, M.D., St. Louis.

The Little Symphony Association of St. Louis recently elected **Lauren V. Ackerman**, M.D., Webster Groves, as president.

At a meeting in January of the Medical Secretaries and Assistants Society of Greater St. Louis, **Armand E. Brodeur**, M.D., St. Louis was a speaker, discussing "What Infant Heart Disease Is Like."

The Audrian County Hospital medical staff has elected Dr. **Lawrence K. Epple**, Mexico, as chief of staff. Dr. **Ned D. Rodes**, Mexico, was elected vice chief of staff.

BLUE SHIELD PLANS—Continued

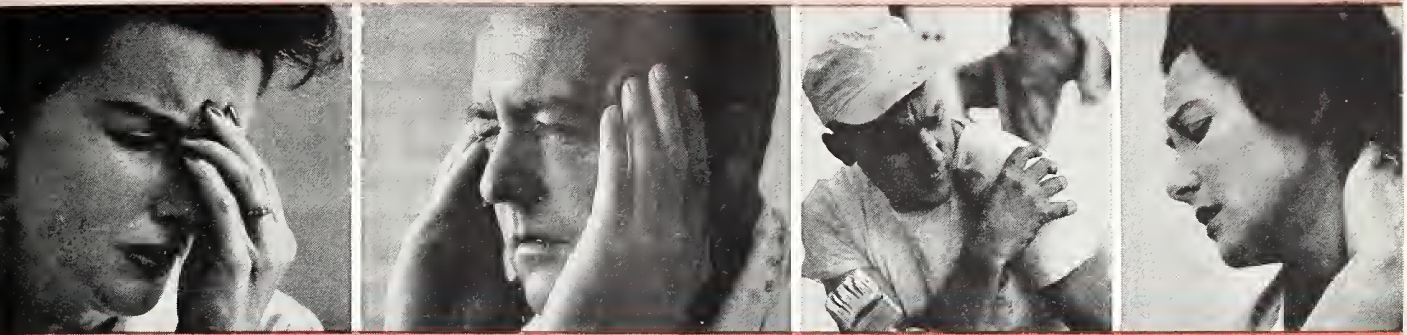
R. O. Muether, M.D., president; W. F. Francka, M.D., first vice president; Leo J. Hartnett, M.D., second vice president, Stephen J. Wolff, secretary, and Richard J. Connors, treasurer.

The Kansas City board of directors includes the following: Drs. Williston P. Bunting, Frederick H. Hartwig, Thomas M. Johnson, Ira C. Layton, Gerald L. Miller, Humbert M. Parker, Albert J. Rettenmaier and Ellsworth H. Trowbridge, Jr., Kansas City.

Also on that board are Drs. P. E. Hiebert and Charles H. White, Kansas City, Kansas; Peter V. Siegel, Smithton; Donald J. Smith, Overland Park, Kansas; A. E. Spelman, Smithville; Hill C. Thurman, Parkville, and Ernest E. Wadlow, St. Joseph.

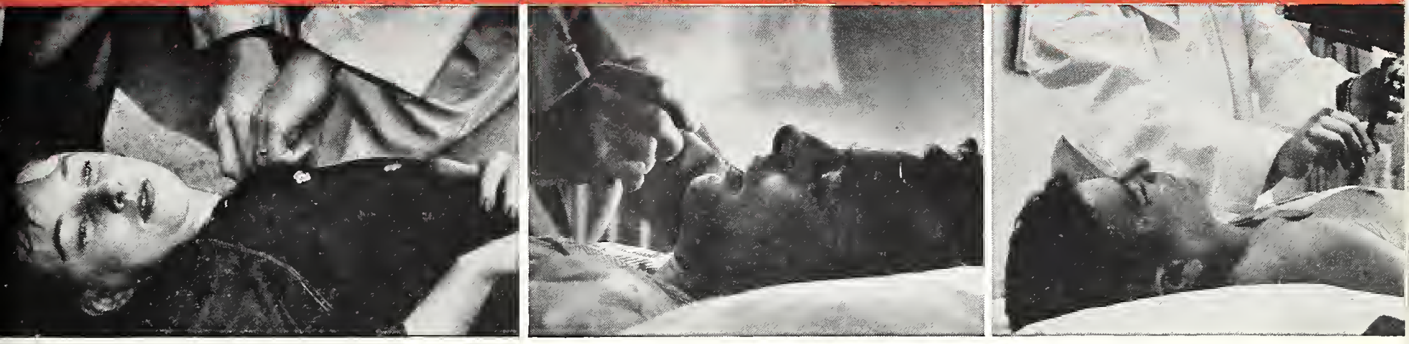
Officers for Surgical Care, Inc., for 1960-1961 are Hubert M. Parker, M.D., president; Ira C. Layton, M.D., first vice president; Forrest F. Dodds, second vice president; Gerald L. Miller, M.D., secretary; H. Wade Zimmerman, treasurer, and Theodore A. Johnstone, assistant treasurer.

Percodan tablets effectively relieve pain through a range of



intensities commencing with moderate pain and extending

through major traumatic areas into further regions of severe pain



Percodan®

(Salts of Dihydrohydroxycodeinone and Homatropine, plus APC)
TABLETS

for pain

prompt relief
profound relief
prolonged relief

ACTS FASTER—usually within 5-15 minutes. **LASTS LONGER**—usually 6 hours or more. **MORE THOROUGH RELIEF**—permits uninterrupted sleep through the night. **RARELY CONSTIPATES**—excellent for chronic or bedridden patients.

AVERAGE ADULT DOSE: 1 tablet every 6 hours. May be habit forming. Federal law permits oral prescription.

Each PERCODAN* Tablet contains 4.50 mg. dihydrohydroxycodeinone hydrochloride, 0.38 mg. dihydrohydroxycodeinone terephthalate, 0.38 mg. homatropine terephthalate, 224 mg. acetylsalicylic acid, 160 mg. acetophenetidin, and 32 mg. caffeine.

Also available—for greater flexibility in dosage—PERCODAN®-DEMI: The PERCODAN formula with one-half the amount of salts of dihydrohydroxycodeinone and homatropine.

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Recently reelected to the State Advisory Council to the Division of Health were **Robert B. Bassett**, M.D., St. Louis; **Arthur D. Markel**, M.D., Poplar Bluff; **A. E. Spelman**, M.D., Smithville; James D. Hicks, D.O., St. Louis; Mr. Ralph D. Foster, Springfield; Mrs. Alex Vetter, Jefferson City, and Mr. Warner Byars, Hannibal. The Council approves requests for and expenditure of federal hospital funds in the state under the Hill-Burton law and serves as an advisory group in the development of rules and regulations for the State Hospital Licensing Law.

The International College of Chest Physicians meeting in Vienna, Austria, appointed **Michael Bernreiter**, M.D., Kansas City, a member of the international committee on electrocardiography and vectorcardiography.

New president of the medical staff of the Gen. John J. Pershing Hospital, Brookfield, is **John R. Dixon**, M.D., Brookfield. Dr. **B. D. Howell**, Brookfield, is secretary.

Speaking on bone injuries and proper emergency care of the injured, **W. W. Hurst**, M.D., Joplin, addressed a meeting of an advanced first aid class.

At the 27th annual meeting of the St. Joseph Organization for Public Health Nursing, meeting in St. Joseph, **Manson B. Pettit**, M.D., was the luncheon speaker.

The Sedalia Business and Professional Women's Club had as a recent speaker **Paul L. Barone**, M.D., Nevada.

His discovery and development of Perimycin was described by **Wilfred E. Wooldridge**, M.D., Springfield, at a meeting of the New York Chapter of the Society of American Bacteriologists on January 19.

A testimonial luncheon was given in January for **Carl F. Vohs**, M.D., St. Louis, chairman for twelve years of the medical advisory committee for the St. Louis Chapter of the National Foundation.

The St. Mary's Group Hospitals, St. Louis, reelected **Willard Bartlett, Jr.**, M.D., as president of the medical staff. **Clement B. Grebel**, M.D., was elected vice president, and **James G. Janney, Jr.**, M.D., was elected secretary.

New chief of staff of the St. Francis Hospital, Maryville, is **G. R. Wempe**, M.D., Maryville. **B. F. Byland**, M.D., is vice chief, and **W. R. Jackson**, M.D., is secretary.

John R. Buckner, Springfield, executive director of the Greene County Medical Society, was named "Young Man of the Year" by the Springfield Junior Chamber of Commerce and given the 1960 Distinguished Service Award.

ONTOGENETIC NUTRITION

A symposium on "Ontogenetic Nutrition" will be presented at the University of Missouri School of Medicine at 1:30 p.m., April 5. The program is sponsored by the National Vitamin Foundation. The program follows:

1:30 p.m. Welcome, Vernon E. Wilson, M.D., Dean, University of Missouri School of Medicine.

1:35 p.m. Introduction, Thomas D. Luckey, Ph.D., Professor of Biochemistry.

1:40 p.m. Fetal Nutrition (Nutrition in Pregnancy), Robert W. Hillman, M.D., Associate Professor of Environmental Medicine, New York University College of Medicine.

2:25 p.m. Infant Nutrition: Premature and Normal Born, Harold M. Nitowsky, M.D., Assistant Professor of Pediatrics, Johns Hopkins University School of Medicine.

3:20 p.m. Child Nutrition, Robert M. Jackson, M.D., Professor of Medicine, University of Missouri School of Medicine.

4:05 p.m. Nutrition in Adolescence, David B. Coursin, M.D., Chief of Pediatrics and Director of Research, St. Joseph Hospital, Lancaster.

7:45 p.m. Introduction, Dr. Robert S. Goodhart, Scientific Director, The National Vitamin Foundation, New York City.

7:50 p.m. Adult Nutrition, John F. Mueller, M.D., Associate Professor of Nutrition, Cincinnati General Hospital.

8:30 p.m. Geriatric Nutrition, Robert Hillman, M.D.

9:20 p.m. Panel Discussion.

You see an improvement within a few days
Thanks to your prompt treatment and the smooth action of Deprol, her depression is relieved and her anxiety and tension calmed — *often in a few days.* She eats well, sleeps well and soon returns to her normal activities.

Lifts depression...as it calms anxiety!

Smooth, balanced action lifts depression as it calms anxiety...rapidly and safely

Balances the mood — no "seesaw" effect of amphetamine-barbiturates and energizers. While amphetamines and energizers may stimulate the patient — *they often aggravate anxiety and tension.*

And although amphetamine-barbiturate combinations may counteract excessive stimulation — *they often deepen depression.*

In contrast to such "seesaw" effects, Deprol's smooth, *balanced* action lifts depression as it calms anxiety — both at the same time.

Acts swiftly — the patient often feels better, sleeps better, within a few days. Unlike the delayed action of most other antidepressant drugs, which may take two to six weeks to bring results, Deprol relieves the patient quickly — often within a few days. Thus, the expense to the patient of long-term drug therapy can be avoided.

Acts safely — no danger of liver damage. Deprol does not produce liver damage, hypotension, psychotic reactions or changes in sexual function — frequently reported with other antidepressant drugs.

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate. **Supplied:** Bottles of 50 light-pink, scored tablets. Write for literature and samples.

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Ramblings of the Field Secretary

It seems that medicine is flying high these days. The Missouri Chapter of the Flying Physicians Association will have a headquarters room at the Muehlebach Hotel during the Annual Meeting of the Missouri State Medical Association, March 19-22. The headquarters room number will be posted on the bulletin board and word left at the desk so that all members of the FPA can find a place to feel at home during the State Medical Association Convention.

Dr. Max presented the gavel to Dr. Weir.

Plans are to have a luncheon or a special cocktail hour for the flying members and their wives as well as a business session where a program for the ensuing year will be discussed. These particular functions are tentatively scheduled for Monday, March 20. The FPA is a national organization interested in aviation medicine and is composed of physicians from all specialties and segments of the profession.

New officers stood in a receiving line.

The 126th Annual Meeting and Installation of Officers of the St. Louis Medical Society was held at the Society's headquarters building, Tuesday evening, January 3, 1961. Dr. Paul F. Max, retiring president, opened the meeting and gave a short address covering specific activities of the society during the last year. He then requested that the new officers and new councilors be escorted to the installation platform. Dr. Don C. Weir, incoming president, was requested to step to the rostrum and receive the gavel and the best wishes of the retiring president.

Dr. Weir was congratulated by friends.

A buffet and dancing were featured.

In his address President Weir presented a number of points representing much food for thought. One of his main points had to do with the problem of securing more qualified and outstanding students for the study of medicine.

At the conclusion of the formal installation procedure in the auditorium, all were invited to reassemble in the banquet room where a receiving line of the new officers, council members and their wives greeted those in attendance. Ad-

once again, an active hand in "doing"–

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"superior to aspirin"[2] and with a "higher 'therapeutic index'"[1]

When sodium should be avoided—

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1. Barden, F. W., et al.: J. Maine M. A. 46:99, 1955.
2. Ford, R. A., and Blanchard, K.: Journal-Lancet 78:185, 1958.

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In each yellow enteric-coated PABALATE *tablet:*

Sodium salicylate (5 gr.) 0.3 Gm.
Sodium para-aminobenzoate (5 gr.) 0.3 Gm.
Ascorbic acid . . . . . 50.0 mg.

In each pink enteric-coated PABALATE-SODIUM FREE *tablet:*

Same formula as PABALATE, with sodium salts replaced by potassium salts.

In each light blue enteric-coated PABALATE-HC *tablet:*

Same formula as PABALATE-SODIUM FREE, plus hydrocortisone (alcohol) . . . 2.5 mg.

Making today's medicines with integrity . . . seeking tomorrow's with persistence.

ditional factors of the program included tasty refreshments both liquid and solid. An orchestra provided music for dancing

New officers of the Society are: Don C. Weir, president; James M. Macnish, president-elect; George L. Hawkins, Jr., vice president; and Edward D. Kinsella, secretary.

Officers were seated at the head table.

A most pleasant evening of festivities served to ring down the curtain on a fine presidential year for retiring president, Dr. Joseph B. Kendis, and to initiate an equally potential one for incoming president, Dr. George J. L. Wulff, Jr., of the St. Louis County Medical Society, Wednesday evening, January 11. This affair took place at Le Chateau, just west of Lindberg on Clayton Road, St. Louis County. In his out-going remarks, Dr. Kendis discussed the Society's program during the last year and stressed particularly the new program launched by the St. Louis County Medical Society during 1960 for furnishing medical and surgical services to those citizens 65 and over at reduced fees where such need is made known. Dr. Kendis was undoubtedly quite pleased when presented a scroll from the Women's Auxiliary to the St. Louis County Medical Society in appreciation of his assistance and cooperation given the Auxiliary during his term of president of the medical society.

Dr. Wulff expressed the Society's appreciation to Dr. Kendis.

Dr. Kendis presented the gavel to Dr. Wulff.

In taking over the gavel, incoming president Dr. Wulff expressed the sincere thanks of the Society for the fine leadership of Dr. Kendis during his term as president. In his inaugural remarks, Dr. Wulff specifically requested that the entire membership lend a hand in 1961 and not "let George do it" alone.

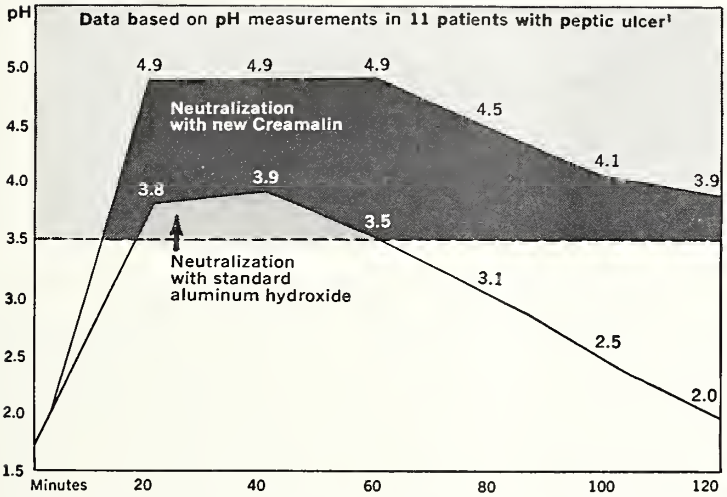
Dr. Muether, President of the Missouri State Medical Association, and Mrs. Muether were seated at the head table.

In addition to these activities, it is well to mention that the evening festivities began with a time for socializing, followed by dinner, the formal program proceedings, and then terminated with a final period of dancing to music just right for the occasion.

New officers of the society are: George J. L. Wulff, president; Edgar W. Davis, president-elect; James C. Sisk, vice-president; Charles Miller, Jr., secretary; and C. Reed Boles, treasurer.

At the site of peptic ulcer

Following determination of basal secretion, intragastric pH was continuously determined by means of frequent readings over a two-hour period.



neutralization is much faster and twice as long with

New CREAMALIN® ANTACID TABLETS

New proof in vivo[1] of the much greater efficacy of new Creamalin tablets over standard aluminum hydroxide has now been obtained. Results of comparative tests on patients with peptic ulcer, measured by an intragastric pH electrode, show that new Creamalin neutralizes acid from 40 to 65 per cent faster than the standard preparation. This neutralization (pH 3.5 or above) is maintained for approximately one hour longer.

New Creamalin provides virtually the same effects as a liquid antacid[2] with the convenience of a tablet.

Nonconstipating and pleasant-tasting, new Creamalin antacid tablets will not produce "acid rebound" or alkalosis.

Each new Creamalin antacid tablet contains 320 mg. of specially processed, highly reactive, short polymer dried aluminum hydroxide gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles of the powder offer a vastly increased surface area for quicker and more complete acid neutralization.

Dosage: Gastric hyperacidity — from 2 to 4 tablets as necessary. Peptic ulcer or gastritis — from 2 to 4 tablets every two to four hours. Tablets may be chewed, swallowed whole with water or milk, or allowed to dissolve in the mouth. **How supplied:** Bottles of 50, 100, 200 and 1000.

1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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MISSOURI STATE MEDICAL ASSOCIATION

103rd Annual Session

Hotel Muehlebach, Kansas City

March 19, 20, 21, 22, 1961

TIME AND PLACE OF MEETINGS

Sunday, March 19

12:30 p.m. Registration for House of Delegates, Grand Ball Room.
1:30 p.m. House of Delegates, Colonial Ball Room.
3:00 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms A, 4, 362, 363, 364.
7:00 p.m. Buffet Dinner in Honor of Secretaries and Presidents of County Medical Societies and New Members. Colonial Ball Room.

Monday, March 20

8:00 a.m. Registration, Grand Ball room.
8:00 to 9:00 a.m. Coffee and Rolls, Foyer, Grand Ball Room.
9:00 a.m. Refresher Courses, Colonial Ball Room, Rooms 362, 363, 364.
10:00 a.m. Intermission to View Exhibits, Mezzanine and Grand Ball Room.
10:30 a.m. Scientific Session, Colonial Ball Room.
12:00 noon Committee on Maternal Welfare Luncheon, Thianon Room.
12:00 noon 50 Year Club Luncheon, Room 364.
2:00 p.m. Scientific Sessions, Colonial Ball Room and Room T 22.
3:30 p.m. Intermission to View Exhibits, Mezzanine and Grand Ball Room.
4:00 p.m. House of Delegates, Colonial Ball Room.
4:45 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms A, 4, 362, 363.
6:30 p.m. Committee on Diabetes and Missouri Diabetes Association Dinner Meeting, Room 364.
6:00 p.m. Missouri Surgical Society Dinner Meeting, Kansas City Club.

Tuesday, March 21

8:00 a.m. Registration, Grand Ball Room.
8:00 to 9:00 a.m. Coffee and Rolls, Foyer, Grand Ball Room.
9:00 a.m. Scientific Session, Colonial Ball Room.
10:30 a.m. Intermission to View Exhibits, Mezzanine and Grand Ball Room.
11:00 a.m. Scientific Session, Colonial Ball Room.
12:00 noon Committee on Maternal Welfare Luncheon, Trianon Room.
2:00 p.m. Scientific Session, Colonial Ball Room.
2:30 p.m. Intermission to View Exhibits, Mezzanine and Grand Ball Room.
3:00 p.m. Scientific Sessions, Colonial Ball Room and Room T 22.
7:30 p.m. Annual Banquet in Honor of Past Presidents, Colonial Ball Room.

Wednesday, March 22

7:30 a.m. Registration, Grand Ball Room.
7:30 a.m. Breakfast Meeting of the House of Delegates, Trianon Room.
9:30 a.m. Scientific Sessions, Colonial Ball Room and Room T 22.
11:00 a.m. Intermission to View Exhibits, Mezzanine and Grand Ball Room.
11:30 a.m. Scientific Session, Room T 22.

REFRESHER COURSES

Monday, March 20, 1961, Hotel Muehlebach

9:00 a.m. Refresher Courses:
Office Ophthalmology, John A. Buesseler, M.D., Columbia, Room 362.

This presentation will consist of an illustrated categorization of the various important ophthalmologic disorders encountered in general practice, their various causations and manifestations. Diagnostic criteria and modes of treatment will be particularly stressed.

ANNOUNCING A CHANGE IN NAME
without change in formula or patient benefits

Centalex is now called **elixir cenalene**

Trademark

a cerebral tonic-stimulant fortified with neurotropic vitamins

helps the geriatric patient return from the shadowland of senility

To improve mental function and behavior patterns in the geriatric patient, Elixir CENALENE provides the cerebral-stimulating action of **pentylenetetrazol** fortified with **thiamine, niacinamide,** and **vitamin B_{12}.** Specifically counteracts typical symptoms of degenerative changes in the central nervous system of elderly patients, particularly those with cerebral arteriosclerosis . . . and can be given indefinitely to responsive patients because of low incidence of side effects or toxicity in usual effective dosage.

Patients are helped to make better social adjustments . . . to lead happier, more useful lives . . . and to become **less of a problem** to themselves, relatives, or institutions.

Each teaspoonful (5 ml.) contains 100 mg. Cenalene (brand of pentylenetetrazol), 1.67 mg. thiamine HCl, 7.5 mg. niacinamide, and 2.5 mcg. cyanocobalamin (vitamin B_{12}); alcohol, 15%. **Available** in bottles of one pint and one gallon.

Literature on request

CENTRAL

THE CENTRAL PHARMACAL COMPANY
Products Born of Continuous Research
Seymour, Indiana

Office Urology, James C. Cope, M.D., Columbia, Room 363.

The presentation will open with a discussion of what is office urology and the extent of diagnostic and therapeutic measures that may be done as office procedures and what diagnostic instruments should be in every physician's armamentarium. This will be followed by a discussion of diagnostic points on all urologic diseases. Office treatment of the minor urologic difficulties will be discussed.

Electrocardiography, John A. Nuetzel, M.D., Clayton, Colonial Ball Room.

This refresher course will be limited to the discussion of present concepts of the normal electrocardiogram. This will include appraisal of normal rate, rhythm, intervals and various parts of the electrocardiographic cardiac cycle. Normal variants subject to misinterpretation will be shown.

Emergencies in the Newborn Infant, M. Remsen Behrer, M.D., St. Louis, Room 364.

Most pathologic processes in the newborn infant require rapid and careful handling in order to save the infant's life. Accurate, early diagnosis is necessary to institute proper therapy before deleterious effects occur. Unfortunately, there is no adequate treatment in many situations because of lack of understanding of the disease process involved, but this only makes it more imperative to handle the others properly.

The most common medical emergency in the newborn infant is the resuscitation of an unresponsive baby. The newest recommended procedures will be discussed and demonstrated. Other topics to be discussed will be tracheoesophageal fistulae, obstruction of the gastrointestinal tract, convulsions and acute infections. Diagnostic methods and therapy will be outlined.

10:00 a.m. Intermission to View Exhibits.

GENERAL MEETING

Monday, March 20, 1961, Colonial Ball Room, Hotel Muehlebach

10:30 a.m. Panel: What's New?
Moderator: Kenneth K. Keown, M.D., Columbia.

Tranquilizers and Analgesics, Jackson A. Smith, M.D., Chicago.

The types of patients for whom these drugs are recommended, the period of time they should be continued before either the patient or the physician becomes discouraged and the superiority of one compound as compared to another—are areas not yet dulled by general agreement. These problems are considered. In addition, this present age of "Lost Tranquility" is briefly noted.

Radiologic Diagnosis, Armand E. Brodeur, M.D., St. Louis.

Burns, William Stoneman, M.D., St. Louis.

Recent clinical and experimental work will be outlined in the two general areas of the burn problem: care of the burn wound and general supportive measures.

Research involving the practical aspects of the clinical problem as well as investigative work likely to affect the fundamental principles of burn management will be critically discussed.

Procedures and routines which the discussant has found particularly useful in children and the elderly will be described and brief résumé of changing trends in burn care at centers where larger volumes of burned patients are handled will be given.

Allergies, Giles A. Koelsche, M.D., Rochester, Minn.

The presentation will include discussion of the following points:

(1) The immunologic nature of collagen or auto-immune diseases; possible mechanisms involved in their development and some classic examples.

(2) The application of basic knowledge regarding tissue transplantation and immunologic tolerance to problems relating to the grafting of tissue in humans.

(3) Date suggesting a role of immunologic mechanisms in resistance to cancer.

(4) The advantages of water-in-oil emulsions of aqueous extracts of allergens in desensitization programs.

(5) The place of hypnotherapy, if any, in the treatment of allergic disorders.

(6) The use of the fluorescein-labeled antibody in the development of a diagnostic test for pertussis.

COMMITTEE ON MATERNAL WELFARE

LUNCHEON MEETING

Monday, March 20, 1961, 12:00 noon, Trianon Room, Hotel Muehlebach

James E. Keeler, M.D., Kansas City, Presiding

Report of the Committee on Maternal Welfare, Robert S. Brown, M.D., Kansas City.

Bacterial Shock, Seymour Monat, M.D., St. Louis.

50 YEAR CLUB

LUNCHEON MEETING

Monday, March 20, 1961, Room 364, Hotel Muehlebach

Organization of 50 year club.

GENERAL MEETING

Monday, March 20, 1961, Colonial Ball Room, Hotel Muehlebach

Robert B. Bassett, M.D., St. Louis, Presiding

2:00 p.m. Treatment of Diseases of the Thyroid, George Crile, M.D., Cleveland.

Physicians and surgeons have been slow in applying to their practice much of the basic knowledge of thyroid physiology that has been developed in the last twenty years. In certain areas, struma lymphomatosa, for example, is still being treated surgically when it is well known that feeding of desiccated thyroid causes enlargement of the thyroid to shrink or disappear.

Frequently small multinodular goiters are treated by thyroidectomy instead of by thyroid feeding, even when there is nothing about the goiter to raise the suspicion of malignancy. Frequently following operations for nodular goiter, patients are not given thyroid to prevent recurrences, and frequently after operations for well differentiated and endocrine-dependent thyroid cancers thyroid therapy is not given despite the fact that its value in preventing growth of any tumor that might be present or in the control of the growth of metastases is well established.

Too much emphasis has been placed on destruction of residual thyroid cancer by radioactive iodine or external irradiation and not enough on suppression of its growth by thyroid feeding. There is evidence to suggest that radiation may in certain cases induce change of thyroid cancers to more malignant forms and that for this reason the primary treatment of inoperable thyroid cancers of the differentiated type should be by thyroid feeding rather than by radiation therapy.

Sponsored by the Missouri Surgical Society.

2:30 p.m. A Natural History of Juvenile and Adult Diabetes, Robert C. Hardin, M.D., Iowa City, Iowa.

Patients with diabetes are of all ages but most of them are elderly and have had the disease for a relatively short time. There are important clinical differences between these patients and the less numerous group whose onset of diabetes occurs early in life.

The juvenile diabetic patient has no serious clinical complications in the first 10 years. Later he typically develops capillary degeneration with retinopathy as the chief manifestation. Serious degrees of capillary degeneration lead to blindness and to renal failure.

The older diabetic patients have arteriosclerosis as the most common complication. This most often affects the heart and the legs and is greater both in incidence and severity than among persons of equal age without diabetes. Infections, particularly of the respiratory system and the urinary tract, are also common in older diabetic persons.

The diagnosis of diabetes is usually easy in the young because the disease is always severe. The older patient is more likely to have mild diabetes with few symptoms. Sometimes, from the clinical standpoint, complications seem to appear before the underlying disease in the older patients.

The treatment of the young must be concerned with diabetes itself. The juvenile onset type of diabetes is often difficult to control but there is a serious penalty for failure. The older patient is easily controlled but his complications often require maximum effort.

Sponsored by the Missouri State Surgical Society.

3:00 p.m. The Changing Epidemiology of Tuberculosis, John S. Chapman, M.D., Dallas, Texas.

As the incidence of new cases of tuberculosis has declined, the incidence of the positive skin test among children has also declined. Because of this it is now possible to determine with a much greater degree of accuracy the way in which tuberculosis is spread from the open case to the healthy population.

Figures seem to indicate that the greatest spread takes place within the families of tuberculous adults, but that the spread is not uniform among children. In general, younger children are more affected than older. The degree of infectivity appears to be controlled in part by the amount and positivity of the sputum. Present work also confirms data from other sources indicating that the tuberculous male is a greater transmitter of the disease than the female. The importance of the elderly male as a transmitter of the disease is beginning to emerge, in that in many cases studied the grandfather was the source of infection. The hardest single aspect of contagion to measure is the duration of open disease in the adult. In many cases the degree of transmission of infection in the family seems to be related to this least measurable element. At the same time, it appears certain that young infants may be infected within as short a span as six weeks after birth.

The clarification of the transmission of human tuberculosis and the development of skin antigens for infections caused by other acid-fast mycobacteria permits the beginning study of the epidemiology of the diseases caused by anonymous mycobacteria. The epidemiologic data in regard to these diseases is yet too small to permit any clear conclusions.

Sponsored by the Missouri Chapter, American College of Chest Physicians.

3:30 p.m. Intermission to View Exhibits.
4:00 p.m. House of Delegates, Colonial Ball Room.
4:30 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms A, 4, 362, 363.

PANEL

Monday, March 20, 1961, Room T 22, Hotel Muehlebach

2:00 p.m. Panel: Leukemia.
Moderator: Edward H. Reinhard, M.D., St. Louis.

Basic Considerations Concerning the Etiology and Pathogenesis of Leukemia, William J. Harrington, M.D., St. Louis.
Unusual Clinical Manifestations and Complications of Leukemia, Edward H. Reinhard, M.D., St. Louis.
Treatment of the Chronic Leukemias, Gustave Eisemann, M.D., Kansas City.
Treatment of the Acute Leukemias, James P. King, M.D., St. Louis.
Questions and Answers.

Sponsored by Missouri Division, American Cancer Society.

3:30 p.m. Intermission to View Exhibits.
4:00 p.m. House of Delegates, Colonial Ball Room.
4:30 p.m. Reference Committee Meetings, Colonial Ball Room, Rooms A, 4, 362, 363.

COMMITTEE ON DIABETES AND MISSOURI STATE DIABETES ASSOCIATION

DINNER MEETING

Monday, March 20, 1961, 6:30 p.m., Room 364, Hotel Muehlebach

H. E. Oppenheimer, M.D., St. Louis, Presiding

Convulsive Disorders Complicating Juvenile Diabetes, Robert C. Hardin, M.D., Iowa City, Iowa.

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MISSOURI STATE SURGICAL SOCIETY

DINNER MEETING

Monday, March 20, 1961, 6:00 p.m., Kansas City Club

Some Problems Connected with the Treatment of Cancer with Emphasis on Cancer of the Breast, George Crile, Jr., M.D., Cleveland, Ohio.

(Reservations to be made through John A. Growdon, M.D., Professional Building, Kansas City.)

GENERAL MEETING

Tuesday, March 21, 1961, Colonial Ball Room, Hotel Muehlebach

9:00 a.m. Panel: Hypnosis: Indications and Complications.
Moderator: Henry V. Guhleman, Jr., M.D., Jefferson City.

Obstetrics, Melvin M. Schwartz, M.D., St. Louis.

Why use hypnosis instead of chemical anesthesia? There is a definite safety factor in both mother and child in avoiding general anesthesia.

Why then not use natural childbirth? Natural childbirth is fine and, in my opinion, is a type of self-hypnosis.

How is a patient prepared for hypnosis childbirth? I, personally, give a three month course of instruction in groups of three to seven women, one hour weekly.

Are patients forced to use hypnosis? Of course not.

What happens if the subject should come out of trance? There is, of course, an attempt made to help them back into trance state. If this cannot be done, one can always fall back to sedation.

Are there disadvantages in the use of hypnosis? The only disadvantage that I can think of is the amount of time spent with these patients.

Are there dangers in the use of hypnosis in childbirth? I can think of none as long as one sticks to hypno-anesthesia in childbirth.

What technics are used in obstetrical hypnosis? Direct hypno-anesthesia, time distortion, dissociation, diversion and simple relaxation or any combination of these. In discussing these I will also discuss the use of semantics and its importance in hypno-anesthesia.

Psychiatry, Louis J. West, M.D., Oklahoma City.

Recent advances in dynamic psychiatry and in neurophysiology permit a more comprehensive definition of the hypnotic state to be made than has been possible in the past. This definition emphasizes the ways in which the "subject" utilizes normal mental mechanisms in the special service of the hypnotic relationship or rapport with the "operator." Indications and contraindications as well as complications of the use of hypnosis are seen first as they relate to the exercise of these particular mechanisms. Secondly, the use of hypnosis must be understood in terms of the operator's intentions and the actual suggestions (both verbal and nonverbal) that are made in the course of the hypnotic relationship. In some ways, both the advantages and dangers of hypnosis have been exaggerated. However, there are quite real uses and abuses of hypnosis in medical practice. A number of these will be outlined together with a commentary about the relationship of hypnosis to drugs that influences the state of consciousness.

Anesthesia, O. B. Crawford, M.D., Springfield.

In discussing the use of hypnosis in anesthesia in a relatively brief period, it is necessary that emphasis be given certain phases of the subject rather than presenting an outline or résumé. Extensive study, experience with and without personal supervision, and appreciation of its indications and advantages are prerequisites to success with hypnosis in anesthesia. The extent of its clinical application is directly related to the interest and ability of the hypnotist. Therefore, the indications for its use are relative.

The following phases will be elaborated upon: (1) levels or depth of hypnosis, (2) preoperative preparation for anesthesia, (3) hypnosis for premedication, (4) hypno-inductions, (5) hypnosis as supplement to regional and general anesthesia, (6) hypnosis as the primary anesthetic, (7) posthypnotic suggestion for the postoperative period (pain relief, mental attitude), (8) other phases (pain relief for patients with inoperable malignancy, painless hypodermics) and (9) possible complications.

10:30 a.m. Intermission to View Exhibits.

GENERAL MEETING

Tuesday, March 21, 1961, 11:00 a.m., Colonial Ball Room, Hotel Muehlebach

M. Pinson Neal, M.D., Columbia, Presiding

11:00 a.m. Hip Joint Problems From Birth to Old Age, J. Vernon Luck, M.D., Los Angeles, Calif.

From many viewpoints the hip joint is the site of more complex clinical problems and has stirred up more interest and controversy than any other joint in the body. As a subject of clinical investigation, it long ago passed up the much maligned sacroiliac joint. Beginning with the problems of the newborn infant, it is safe to say that no other joint more frequently arrives defective, and no other major joint can cause more disturbance in the sunset of life. Between childhood and old age, the performance of the hip is generally fairly good. The patients' concept of the hip and the concept as physicians are often quite different. To the patient, anything from the lumbar region to the sacroiliac area to the lateral trochanteric bursa represents hip trouble.

In this presentation, the various hip joint entities in the different age groups will be discussed. The problems of infancy will, as expected, include dysplasia and dislocations of the hip, congenital coxa vara, pyarthrosis of the hip joint and unrecognized trauma. Legg Perthes disease, slipped capital femoral epiphysis and rheumatoid arthritis in childhood will be reviewed. The complex problem of fractures of the hip in childhood will be discussed. Middle age problems of rheumatoid arthritis and avascular necrosis of the head of the femur will be included. In old age, fractures of the neck of the femur with its influence on the hip joint, arthrofibrosis and a discussion of traumatic arthritis in general will be included. Lastly, and perhaps most important, will be osteoarthritis of the hip.

It has been my privilege to investigate both clinically and from the standpoint of pathogenesis several of the entities that relate to the hip joint. A new concept of the pathogenesis of osteoarthritis will be illustrated by both clinical and pathologic studies. Emphasis will be placed on the importance of early diagnosis, pointing out methods of early recognition of the various entities.

11:45 a.m. Questions and Answers.
Moderator: M. Pinson Neal, M.D., Columbia.

UNIVERSITY OF MISSOURI MEDICAL ALUMNI ASSOCIATION

LUNCHEON MEETING

Tuesday, March 21, 1961, 12:00 noon, Trianon Room, Hotel Muehlebach

John W. McHaney, M.D., Jefferson City, Presiding

Presentation of the Sixth Citation of Merit of the University of Missouri to a Medical Alumnus, James Vernon Luck, M.D., Los Angeles, recipient.

Challenges and Opportunities That Confront the Medical School Alumni, John D. Van Nuys, M.D., Indianapolis, Dean and Professor of Medicine, University of Indiana School of Medicine.

GENERAL MEETING

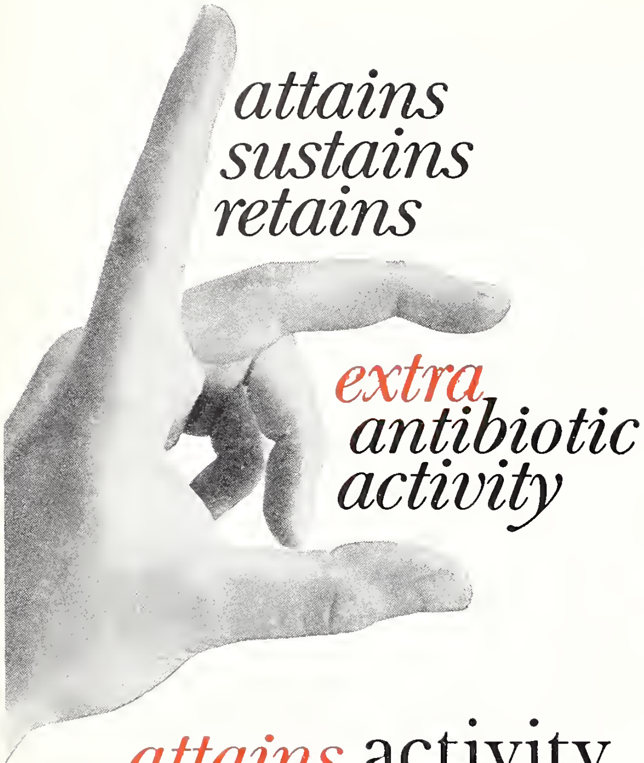
Tuesday, March 21, 1961, 2:00 p.m., Colonial Ball Room, Hotel Muehlebach

Claude J. Hunt, M.D., Kansas City, Presiding

2:00 p.m. Mitral Incompetence, Howard B. Burchell, M.D., Rochester, Minn.

Mitral incompetence has been a particular interest of cardiologists since the time of Laennec and Hope. The technic of cardiac catherization and the

(Continued on page 260)



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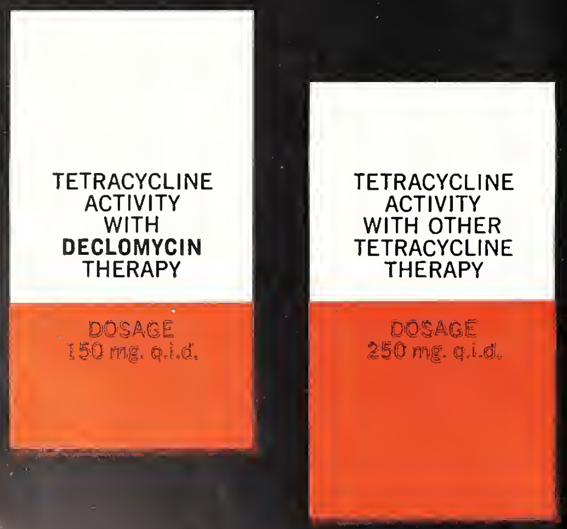

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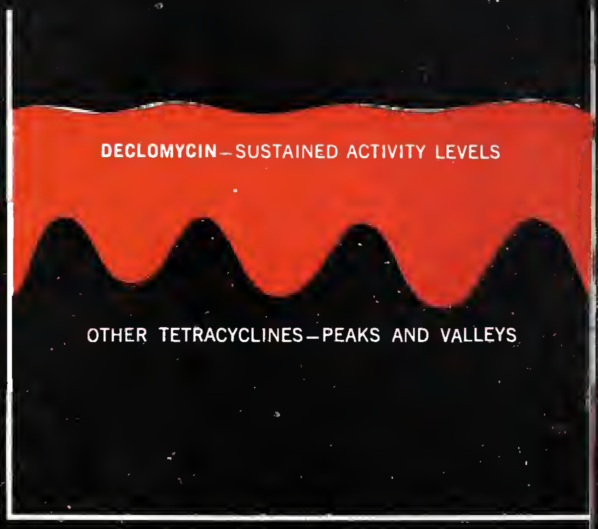

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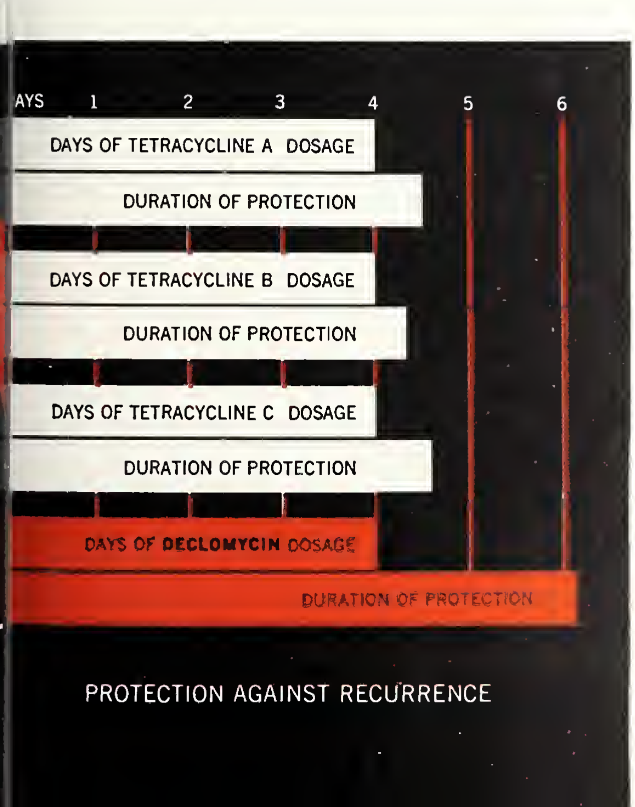

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2:30 p.m. Intermission to View Exhibits.

PANEL

Tuesday, March 21, 1961, 3:00 p.m., Colonial Ball Room, Hotel Muehlebach

3:00 p.m. Panel: Out-Patient Trauma.
Moderator: Robert E. Funsch, M.D., St. Louis.

Injuries Peculiar to Children, J. Vernon Luck, M.D., Los Angeles, Calif.

Points to be discussed will include: the differences between children's fractures and adults; the need for taking x-rays bilaterally when extremities of smaller children are involved. The deformities of children's fractures will be reviewed, including a discussion of the deformities which require eorrection, and those which will correct with growth. Alignment is generally the chief need in children, rather than apposition. Epiphyseal fractures and separations frequently can be taken care of in the out-patient department, but much consideration must be given to the location of the epiphyseal injury and the extent of the deformity. Elbow injuries that can safely be cared for in the out-patient department will be separated from those in which it would be hazardous to undertake out-patient care. The complications and pitfalls of out-patient injuries will be summarized.

Injuries of the Head and Neck: Treatment and Precautionary Measures, Howard J. McAlhany, M.D., Springfield.

The principle phases of this presentation will be (1) to emphasize a patent airway and proper positioning of patient as most important immediate objective in an unconscious patient; (2) to stress the importance of "vital signs" and fluid administration and discuss briefly the use of intravenous urea and hypothermia; (3) to conclude that heroic surgical treatment is not the solution for the problems of head injury. The immediate care of cervical injuries will be reviewed and the indications and contraindications for surgical intervention following trauma of the spine will be discussed.

Injuries of the Knee and Ankle, Paul W. Meyer, M.D., Kansas City.

Injuries of the Wrist and Hand, Otis E. James, Jr., M.D., Kansas City.

Discussion and evaluation will be presented of (1) lacerations of the hand, (2) fractures of the phalanges and injuries to the nails, and (3) common fractures of the wrist and their treatment.

Thermal Injuries, Including Ambulatory Burns and Frostbite, C. Alan McAfee, M.D., St. Louis.

Injuries to the Shoulder and Elbow, Robert E. Funsch, M.D., St. Louis.

Sponsored by the Committee on Trauma, Missouri State Medical Association.

PANEL

Tuesday, March 21, 1961, 3:00 p.m., Room T 22, Hotel Muehlebach

3:00 p.m. Panel: Management of Difficult Heart Problems.

Moderator: Hugh E. Stephenson, Jr., M.D., Columbia.

Panelists:
Theodore E. Keats, M.D., Columbia.
Jack M. Martt, M.D., Columbia.
Henry C. Stoeckle, M.D., Columbia.

Among subjects to be covered are included: problem of the cyanotic infant, the acyanotic baby in heart failure, the problem of the functional murmur, complications of a coronary infarct, intractable angina, myocardial aneurysms, new advances in the management of heart block, premature paroxysmal auricular tachycardia and problems involving premature contractions, cardiac emergencies, evaluation of the rheumatic patient for cardiac surgery and a discussion of the risk of surgery in the patient with cardiac disease.

Sponsored by the Missouri Heart Association.

ANNUAL BANQUET IN HONOR OF PAST PRESIDENTS

Tuesday, March 21, 1961, 7:30 p.m., Colonial Ball Room, Hotel Muehlebach

R. O. Muether, M.D., St. Louis, Presiding

Introduction of Guests.
Presentation of Past Presidents.
Presentation of 50 Year Pins.
Installation of the President, J. H. Summers, M.D., Lebanon.
Presentation of Past President's Key.
Medical and Health Care for the Aged, Congressman Thomas B. Curtis, 2nd District, Missouri.

PANEL

Wednesday, March 22, 1961, 9:30 a.m., Room T 22, Hotel Muehlebach

9:30 a.m. Panel: Exfoliative Cytology in Your Practice.
Moderator: David M. Gibson, M.D., Kansas City.

Panelists:
Hector W. Benoit, M.D., Kansas City.
George O. Miles, M.D., Kansas City.
Robert L. Newman, M.D., Kansas City, Kans.

Sponsored by the Missouri Society of Pathologists

11:00 a.m. Intermission to View Exhibits.

PANEL

Wednesday, March 22, 1961, 9:30 a.m., Colonial Ball Room, Hotel Muehlebach

9:30 a.m. Panel: The Doctor Is Sued.
Moderator: Charles B. Wheeler, M.D., Kansas City.

Panelists:
Frederick D. Lewis, LL.B., Kansas City.
Blake A. Williamson, LL.B., Kansas City.
John M. Kilroy, LL.B., Kansas City.

Personal injury litigation continues to increase and cause contact between the legal and medical professions. Much of the legal strategy involved in such cases is a mystery to the medical witnesses involved. In this panel discussion, two well known legal authorities combine their talents to discuss a case of acute cervical strain from the day of the accident up to and including the trial.

11:00 a.m. Intermission to View Exhibits.

GENERAL MEETING

Wednesday, March 22, 1961, Room T 22, 11:00 a.m., Hotel Muehlebach

Maxwell G. Berry, M.D., Kansas City, Presiding

11:30 a.m. A Review of the Nature of Angina Pectoris, E. Grey Dimond, M.D., La Jolla, Calif.

Angina pectoris is a term frequently used in medicine to indicate the subjective story of a patient who suffers from a particular type of discomfort and which particular discomfort is assumed to result from coronary artery disease. In other words, at the present time there is no way to validate the condition of angina pectoris except by the history presented by the patient.

Attempts at therapy, whether medical or surgical, are impossible to evaluate because of this subjective nature of angina pectoris.

A description of objective means of quantitation of the presence of angina pectoris will be presented. The role of the electrocardiogram, the ballistocardiogram and cardiac catheterization will be discussed. Is angina pectoris associated with physiologic changes in circulation? Are these changes measurable?

Sponsored by the Missouri Society of Internal Medicine.

DELEGATES

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Andrew	Warren C. Baker, Savannah	Forrest C. Long, Savannah
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Barton-Dade	Alvin R. Cain, Lamar	Thomas W. Carroll, Lamar
Barton-Dade	Lee McNeel, Greenfield	E. W. Taylor, Lockwood
Benton	James A. Logan, Warsaw	
Boone	M. Pinson Neal, Columbia	Hugh Stephenson, Columbia
Boone	James C. Cope, Columbia	T. W. Burns, Columbia
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Buchanan	John N. Martin, St. Joseph	R. V. Riddell, St. Joseph
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Butler-Ripley-Wayne	Frank Johnson, Doniphan	Tom Burcham, Doniphan
Butler-Ripley-Wayne	H. H. Cline, Piedmont	
Callaway	James K. Ritterbusch, Fulton	John J. Brown, Fulton
Camden		
Cape Girardeau	H. D. Ridings, Cape Girardeau	S. H. Barnes, Cape Girardeau
Carter-Shannon		
Carter-Shannon		
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Chariton-Macon-Monroe-Randolph	F. A. Barnett, Paris	G. M. Ragsdale, Paris
Chariton-Macon-Monroe-Randolph	A. P. Rowlette, Moberly	C. C. Smith, Moberly
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Clay	J. W. Willoughby, Liberty	J. B. Withrow, N. Kansas City
Clinton	P. T. Luckenbill, Plattsburg	I. R. Kimes, Cameron
Cole	George D. Shull, Jefferson City	J. W. McHaney, Jefferson City
Cooper	G. W. Winn, Boonville	
Dallas-Hickory-Polk	O. A. Griffin, Buffalo	Evelyn Griffin, Buffalo
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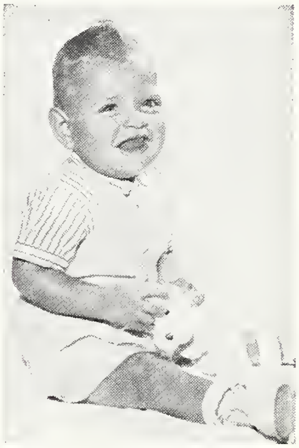
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Carroll	Eugene Bales, Carrollton	E. W. Allen, Carrollton
Grundy	C. H. Cullers, Trenton	C. L. Clark, Trenton
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Jackson	Ralph Perry, Kansas City	Ray O. Keltner, Raytown
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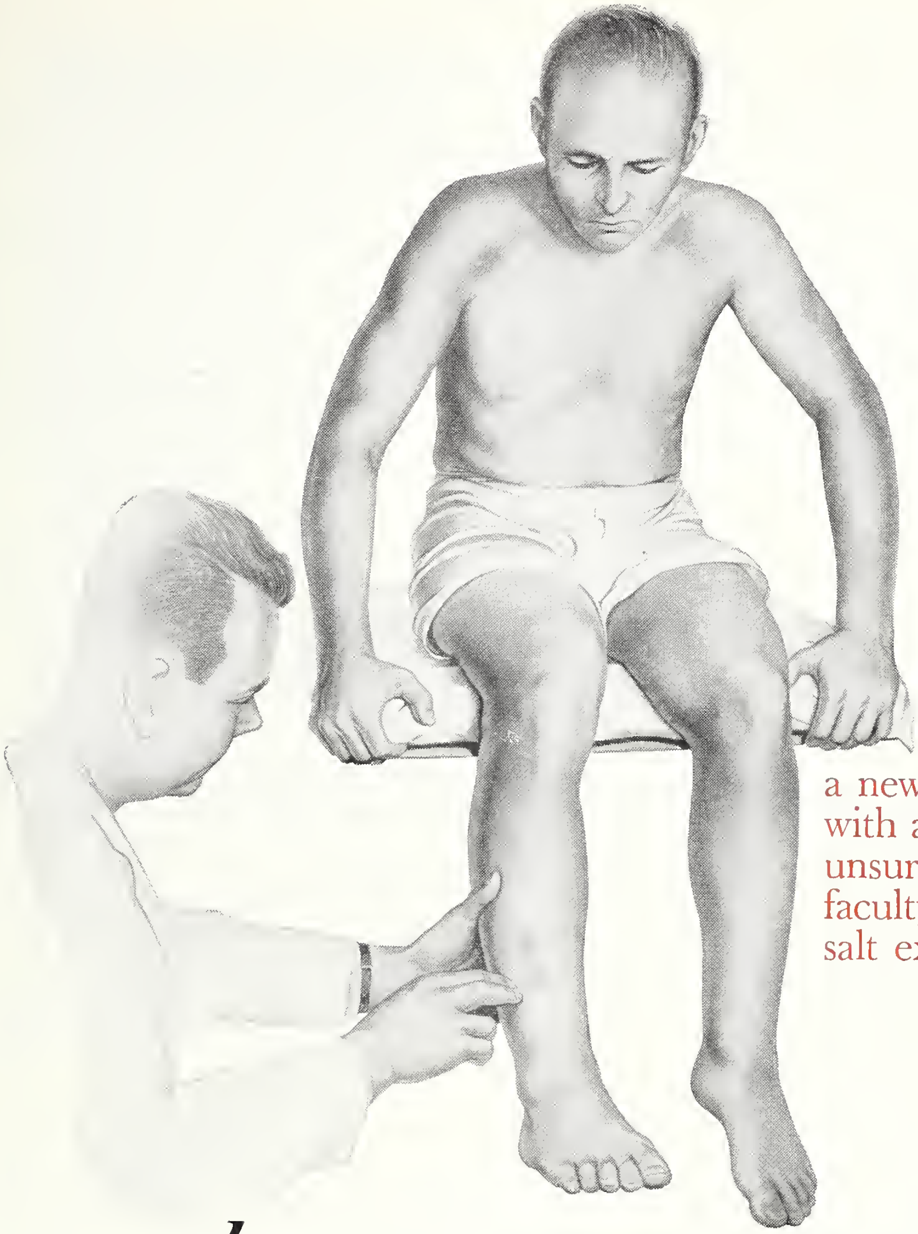
Jackson	G. L. Miller, Kansas City	R. K. Skillman, Kansas City
Jackson	W. C. Mixson, Kansas City	R. Stockton, Kansas City
Jackson		W. F. Wilhelm, Kansas City
Jasper	M. Foster Whitten, Carthage	R. R. Cohle, Carthage
Jasper	G. A. Schulte, Joplin	Virgil Jeans, Joplin
Jefferson	F. L. Kozal, Crystal City	H. Yoskit, Festus
Johnson	Harry Harkness, Warrensburg	M. G. Gongalez, Warrensburg
Lafayette-Ray		
Lafayette-Ray		
Lewis-Clark-Scotland	Landis Y. Davis, Canton	W. L. Ellery, LaGrand
Lewis-Clark-Scotland		
Lewis-Clark-Scotland		
Lincoln-St. Charles	E. O. Damron, Elsberry	Paul T. Berry, Troy
Lincoln-St. Charles	William H. Poggemeier, Jr., St. Charles	E. J. Canty, St. Charles
Marion-Ralls-Shelby	Robert Lanning, Hannibal	B. L. Murphy, Hannibal
Marion-Ralls-Shelby		
Marion-Ralls-Shelby		

County Society	*Delegate*	*Alternate*
Mid-Missouri		
Phelps	M. K. Underwood, Rolla	Wm. R. Lytle, Rolla
Crawford	F. A. Elders, Jr., Cuba	A. R. Bauman, Steelville
Dent	B. J. Bass, Salem	Alice S. Crosby, Salem
Pulaski	W. R. Stevens, Waynesville	Clyde S. Miller, Waynesville
Maries		
Laclede	H. W. Carrington, Lebanon	R. W. Froelich, Lebanon
Miller		
Mineral Area		
St. Francois	G. A. Huckstep, Farmington	H. M. Roebber, Bonne Terre
Iron	George Gay, Ironton	R. E. Harland, Ironton
Madison	C. E. Michaelis, Fredericktown	Marvin Grossman, Fredericktown
Washington	George Cresswell, Potosi	
Reynolds		
Ste. Genevieve		
Moniteau		
Montgomery	E. J. T. Andersen, Montgomery City	S. J. Byland, Wellsville
Morgan	Ray Lyle, Versailles	J. L. Washburn, Versailles
Nodaway-Holt-Atchison-Gentry-Worth	E. D. Imes, Maryville	W. R. Jackson, Maryville
Nodaway-Holt-Atchison-Gentry-Worth	James Humphrey, Mound City	
Nodaway-Holt-Atchison-Gentry-Worth	Edward F. Bare, Tarkio	E. L. Niedermeyer, Tarkio
Nodaway-Holt-Atchison-Gentry-Worth	F. B. Matteson, Grand City	
Nodaway-Holt-Atchison-Gentry-Worth		
North Central		
Adair	M. T. English, Kirksville	S. L. Freeman, Kirksville
Schuyler		
Knox		
Sullivan		
Putnam		
Ozarks		
Barry	Mary Newman, Cassville	Robert Donley, Monett
Lawrence	Kenneth Glover, Mt. Vernon	A. J. Graves, Mt. Vernon
Stone	Fred Wommack, Crane	A. P. Capetti, Crane
Christian	Stanley Roper, Ozark	Donald B. Rogers, Nixa
Taney	J. M. Threadgill, Forsyth	Roy Gillispie, Branson
Newton	M. C. Bowman, Neosho	G. Blankenship, Neosho
McDonald	J. J. Royce, Noel	
Pemiscot	O. W. Cook, Caruthersville	D. R. Hensley, Wardell
Perry	A. E. McDermott, Perryville	J. F. Fairchild, Perryville
Pettis	C. G. Stauffacher, Sedalia	K. B. Gonser, Sedalia
Pike	R. F. Christensen, Louisiana	C. H. Lewellen, Louisiana
Platte	E. Jennings, N. Kansas City	H. C. Thurman, Parkville
St. Louis City	Paul F. Max, St. Louis	W. F. Melick, St. Louis
St. Louis City	Richard W. Yore, St. Louis	M. J. Lonsway, Jr., St. Louis
St. Louis City	S. F. Hampton, St. Louis	E. C. Ernst, Jr., St. Louis
St. Louis City	Arthur W. Neilson, St. Louis	G. B. Starkloff, St. Louis
St. Louis City	Alphonse McMahon, St. Louis	G. R. Aufderheide, St. Louis
St. Louis City	Charles S. Sherwin, St. Louis	A. H. Bindbeutel, St. Louis
St. Louis City	G. L. Hawkins, Jr., St. Louis	C. H. Nicolai, St. Louis
St. Louis City	Louis H. Kohler, St. Louis	Virgil Loeb, Jr., St. Louis
St. Louis City	W. Baumgarten, Jr., St. Louis	J. L. Lucido, St. Louis

County Society	*Delegate*	*Alternate*
St. Louis City	R. V. Boedeker, St. Louis	J. E. VonKaenel, St. Louis
St. Louis City	David N. Kerr, St. Louis	C. Alan McAfee, St. Louis
St. Louis City	J. C. Edwards, St. Louis	W. J. Gillespie, St. Louis
St. Louis City	Henry C. Allen, St. Louis	W. M. Lonergan, St. Louis
St. Louis City	R. B. Bassett, St. Louis	C. E. Lischer, St. Louis
St. Louis City	E. M. Cannon, St. Louis	F. X. Paletta, St. Louis
St. Louis City	Peter G. Danis, St. Louis	R. W. Bartlett, St. Louis
St. Louis City	Charles R. Doyle, St. Louis	Walter Baumgarten, Jr., St. Louis
St. Louis City	Michael M. Karl, St. Louis	H. E. Walters, St. Louis
St. Louis City	Joseph C. Peden, St. Louis	Armand E. Brodeur, St. Louis
St. Louis City	Victor Scherman, St. Louis	R. Potashnick, St. Louis
St. Louis City	Daniel L. Sexton, St. Louis	O. E. Tjoflat, St. Louis
St. Louis City	Jerome I. Simon, St. Louis	L. M. Lawton, St. Louis
St. Louis City	J. W. Thompson, St. Louis	G. H. Ahlering, St. Louis
St. Louis City	Donald C. Weir, St. Louis	J. Otto Lottes, St. Louis
St. Louis City	Edward Kinsella, St. Louis	T. J. Weiler, St. Louis
St. Louis City	James M. Macnich, St. Louis	Wayne O. Gorla, St. Louis
St. Louis	Harold Bailey, St. Louis	Harold Freiheit, Ladue
St. Louis	M. A. Diehr, St. Louis	Louis F. Howe, St. Louis
St. Louis	J. B. Kendis, St. Louis	R. G. Hughes, Creve Coeur
St. Louis	R. A. Walther, Jr., St. Louis	Paul Miles, St. Louis
St. Louis	O. P. Hampton, St. Louis	C. Miller, Jr., Kirkwood
St. Louis	R. C. Kingsland, Clayton	R. J. Mueller, St. Louis
St. Louis	Richard Sutter, St. Louis	M. M. Schwartz, St. Louis
St. Louis	G. J. L. Wulff, St. Louis	Alva Trueblood, St. Louis
St. Louis	E. W. Davis, St. Louis	Louis C. Wyatt, Kirkwood
Saline	R. C. Haynes, Marshall	Alex McBurney, Slater
Semo		
Stoddard		
New Madrid		
Mississippi		
Scott		
South Central		
Howell	H. L. Miller, Willow Springs	M. L. Fowler, West Plains
Oregon	C. W. Cooper, Thayer	A. T. Walker, Mammouth Springs
Texas	Garrett S. Hogg, Jr., Cabool	David G. Wilbur, Cabool
Wright	S. W. Connor, Mt. Grove	R. W. Denney, Mt. Grove
Douglas	M. C. Gentry, Ava	
Ozark		
Webster	T. M. Macdonnell, Marshfield	C. R. Macdonnell, Marshfield
West Central		
Bates	A. L. Hanson, Butler	C. A. Lusk, Jr., Butler
Cass	Edwin Jones, Harrisonville	Herbert A. Tracy, Belton
Cedar	R. L. Magee, Eldorado Springs	W. B. Richter, Stockton
St. Clair	D. H. Giesler, Osceola	R. H. Brownsberger, Appleton City
Vernon	Rolla Wray, Nevada	James Pascoe, Nevada



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The Council

The Council met at Hotel Chase, St. Louis, on January 21-22, 1961, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; Charles R. Doyle, St. Louis; John I. Matthews, Jefferson City; Stanley S. Peterson, Springfield; A. P. Rowlette, Moberly; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Oscar P. Hampton, University City; A. W. Neilson, St. Louis; Rolla B. Wray, Nevada; Messrs. John R. Buckner, Springfield; W. H. Bartleson, Kansas City; Hollister Smith, Gene Lunn, Jordan Singleton, Robert Duffee, Ray McIntyre, Tom R. O'Brien, and Helen Penn, St. Louis.

FIELD SECRETARY'S REPORT

Mr. McIntyre presented a chart to the Council showing answers to a questionnaire sent to fourth year students in the University of Missouri School of Medicine, and also gave statistics on previous years. Of the present class of 59 students, 49 expect to go into private practice; 22 expect to do general practice and 35 plan on practicing in a specialty; 52 intend to remain in Missouri; 25 want to practice in a town of more than 100,000 population, 8 in town of less, 15 in town of less than 50,000, 12 in town of less than 25,000, 8 in town of less than 5,000. One student was undecided about the size of the town he preferred. He reported briefly on the preceptorship program and said that this program is trying to be stressed further.

LOAN FUND

Mr. McIntyre reported that at present there has been loaned $16,265 to medical students and that there are 11 additional requests now being processed.

TREASURER'S REPORT

Dr. Doyle gave a report to the Council, including the cash balance as of December 31, 1960, and said that the books were now being audited and that a financial statement would go to the Council, medical societies and delegates early in February. On motion, duly seconded, the report was accepted.

A.M.A. DELEGATES EXPENSES

After discussion, on motion of Dr. Tillman, duly seconded, it was voted that a definite policy be arranged on expenses of A.M.A. delegates. It was agreed that A.M.A. delegates shall be entitled to reimbursement of expenses for first class, round-trip transportation and food and lodging at the A.M.A. sessions and that any request for additional expenses be referred to the Council. It was pointed out that expenses of an alternate delegate should be paid only if he served as a delegate.

COUNCILOR'S EXPENSES

It was pointed out that the by-laws are not entirely clear on expenses of Councilors and after discussion, on motion of Dr. Tillman, duly seconded, it was voted that Councilors shall be entitled to reimbursement of expenses incurred for first class transportation to and from a Council meeting and for food and lodging during the Council meeting.

EDITORIAL BOARD

Dr. Doyle presented the name of Dr. Joseph V. Finnegan, St. Louis, for appointment to the Editorial Board and on motion, duly seconded, this was approved.

DR. DOOLEY

On motion of Dr. Hollweg, duly seconded, it was voted that Dr. Muether be asked to write a letter for the Association to Mrs. Agnes Dooley expressing sympathy in the death of her son, Dr. Thomas A. Dooley, Jr., and expressing the admiration of the Association for Dr. Dooley and his work.

MISSOURI STATE MEDICAL FOUNDATION

Articles of Incorporation and By-Laws for the Missouri State Medical Foundation, which among other things will encompass the student loan fund of the Association, were presented and discussed. Two suggested changes were made, to clarify membership in the Foundation, and to comply completely with Internal Revenue laws.

The changes will cause Article I—Membership, Sec. 1, to read, "Sec. 1. Membership in the Missouri State Medical Foundation shall be composed of and limited to members in good standing of the Missouri State Medical Association."

An addition, in parenthesis, was added to Article VI—Contracts, Funds & Fiscal Matters, Sec. 8, to read: "Sec. 8. Disposition of Assets on dissolution shall be applied and distributed in accordance with the provisions of Vernon's Annotated Statutes of Missouri, Sections 355.230 and 355.235, and (in accordance with regulations of the Internal Revenue Code of 1954 501 (c) (3) and amendments thereto).

On motion, duly seconded, it was voted that attorneys be instructed to go ahead with the incorporation papers and that they be presented to the House of Delegates.

Trustees

It was pointed out that three additional trustees were needed and to the present three, Drs. Muether, Furlow and Doyle, the Chairman of the Council appointed Drs. Tillman, Hollweg and Bull.

The following report of a joint meeting of the Committees on Medical Economics and on Aging was presented, together with their recommendations, as follows:

COMMITTEES ON MEDICAL ECONOMICS AND AGING

Stanley S. Peterson, M.D., Springfield, Chairman of the Committee on Aging, and A. P. Rowlette, M.D., Moberly, Chairman of the Committee on Medical Economics, presided.

Purpose: Mills-Kerr Bill

The purpose of the meeting was outlined as work toward the implementation for Missouri of Public Law 86-788, the Mills-Kerr bill. Attention was called to the action of the Council which was "approve of the principles outlined in the Mills-Kerr bill and that the legislature be urged to implement the program realistically in

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our state, and that the opinion of the Association be made public."

It was pointed out that the A.M.A. and most states favored implementation of the law; also that method of implementation was left to individual states. It was also brought out that the MSMA House of Delegates had opposed the acceptance of any payments under the vendor program and that only the House of Delegates could change that phase.

Missouri Situation

Figures for Missouri were presented as 470,000 residents over the age of 65; 115,700, or 26 per cent, on old age assistance, with 37,000 of the 115,700 receiving Social Security.

Under the present program the average monthly payment to the 115,700 is $53.05 for subsistence, $6.45 for medical care, with $0.48 going into the vendor pool for medical care, or a total of $60.01, of which the U. S. Government pays 53.42 per cent.

The Mills-Kerr law automatically increased the U. S. Government share of the vendor program by 15 per cent, approximately $100,000 per year.

If state appropriations are increased, it was pointed out that the most advantageous way to utilize additional state funds would be to devote these to subsistence payments and transfer an equal amount of money to medical payments under the vendor program. The government will contribute 53.42 per cent toward additional subsistence payments (up to a total average payment of $65 per month per recipient). The Federal government will contribute 68.42 per cent (53.42 plus 15 per cent) toward vendor medical payments, up to a total of $12 per month per recipient.

Medically Indigent

Programs for medically indigent follow the same general requirements as those for persons on Old Age Assistance with the additional proviso that such programs must include some institutional and some noninstitutional care. There is no financial limit to programs for medically indigent (such as the $12.00 per month per recipient for vendor payments under the OAA program). The Federal government will contribute 53.42 per cent of the expenditure on medically indigent programs. The definition of "medically indigent" and the benefits of the program are left to the discretion of the state.

Discussion

Various phases discussed included the increase to per diem payments to hospitals under the present vendor program, the rising number of persons on social security in the older age group, whether "acute illness" and "medical emergency" be retained in any new legislation, the inclusion of "near needy" under the Mills-Kerr law; the advisability of a lien and recovery law and whether that would decrease or increase those on assistance rolls, what a minimal level as set forth in the Mills-Kerr law might be, the need for a medical advisory set-up in any legislation, the probability that people are getting adequate care in the larger centers but may not be in sparsely populated areas thus making it necessary to go to the state level for care, publicity on action of the committees or of the Council, that doctors still are willing to give medical care to the needy but do not want to be obstructionists, that study should be given to what a minimum should be, that subsistence allotment is not sufficient at present, that "emergency" might well be changed to "necessity."

Action

On motion of Dr. Peterson, duly seconded, it was voted that the staff be asked to prepare recommendations embracing the minimum requirements of the law, unless study finds these to be inadequate, making clear that physicians are not to be paid, that it is recognized that the law is socialistic but also is a compromise and that the problem is not as great as it is made out to be but is worthy for those few to whom it does apply.

Delegates Informed

It was decided that county societies be informed on the Mills-Kerr law and its implications and that they be asked to instruct their delegates to the Annual Session on action to take.

Recommendations of the Committees on Medical Economics and Aging

While it should once again be emphasized that the medical profession, through its experience and its service as provider of care to the sick, knows that the problem of medical care for the aged is not as great as has been pictured in some quarters, the Committees recognize that society will always include some individuals who are unable to provide the necessities of life for themselves.

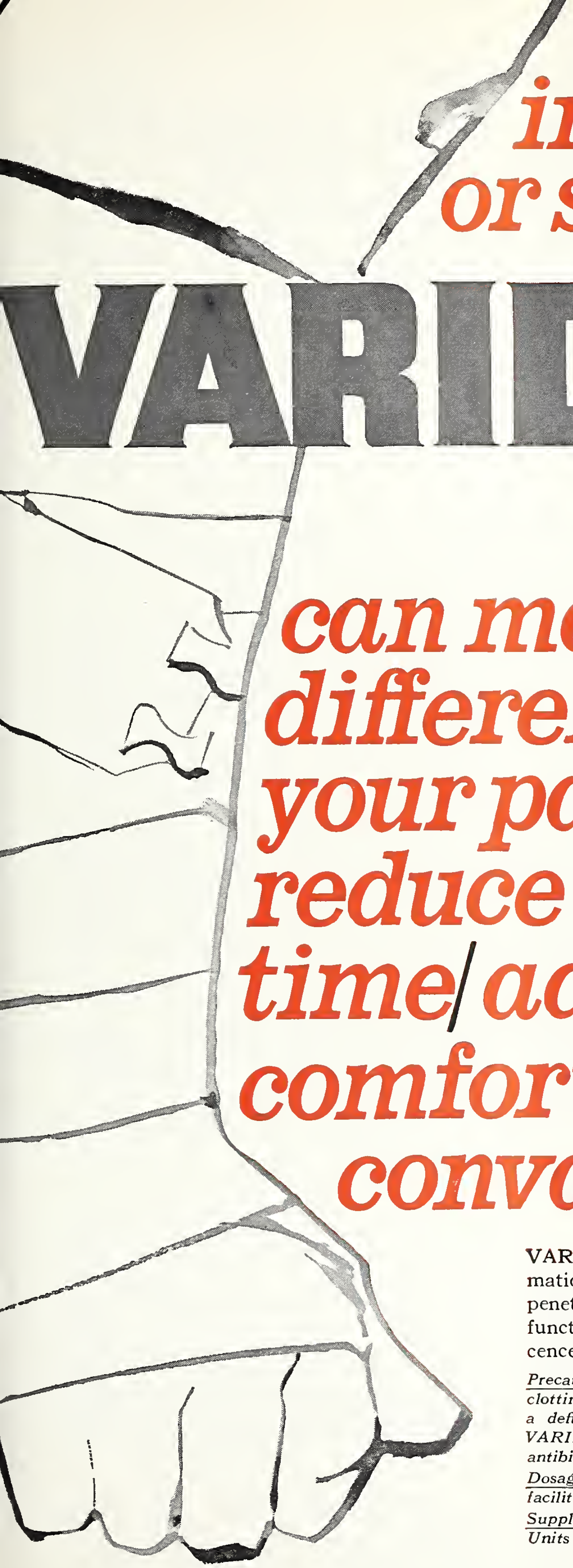
The Committees, therefore, recommend that the Missouri State Medical Association support the principles of the Mills-Kerr Law and urge the legislature to implement the law in Missouri.

At the same time, the Committees recommend that the Association continue the policy enunciated in 1958 by the House of Delegates—that physicians not receive government funds as payment under the so-called "vendor" program for medical care of the indigent—and that this policy be extended to apply to the implementation of the 1960 Mills-Kerr Law in Missouri.

The Committees feel, however, that most of the people who might come under these programs in Missouri have no real wish to become complete wards of the state. They wish to retain their self-respect and pride and to do what they can to maintain themselves through their own efforts or through their families. The Committees believe that all parties—individuals, organizations and government—should use every means to discourage the concept of reliance on welfare programs to pay all costs for all purposes, and to encourage, on the other hand, individuals, their relatives and their friends to accept the personal responsibility to pay what they can toward their living expenses, including medical care where necessary. If outside help then becomes necessary responsibility should, in each instance, be accepted by the local community and county governments.

In the administration of programs implementing the Mills-Kerr Law, the Committees recommend that the Association urge the legislature to continue the official representation of medicine in an advisory capacity through statutory provisions similar to those contained in the present "vendor" program.

As a further general recommendation, the Committees feel that the legislature should be urged to enact a Lien and Recovery Law in Missouri to discourage potential abuse of public assistance programs and encourage acceptance of responsibility for the support of individuals by their families.



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At the present time, the "vendor" program for medical care for public assistance patients includes individuals under four programs—Old Age Assistance, Aid to the Blind, Aid to Dependent Children, and Aid for the Permanently and Totally Disabled. The program provides for increased assistance payments, up to $100 per month, to patients who are permanently and totally bedfast whether confined at home or in a nursing home. It provides also for payments for hospital care in cases of medical emergency or acute serious illness.

State appropriations for the nursing home phase of the program were $1 million a year for the 1959-61 biennium, with another $500,000 a year appropriated for the hospitalization phase.

When the program was begun, payments to hospitals were made on the basis of $5 per day, up to 14 days per confinement, for these patients. Later, this was increased to $10 per day, and payment is currently being made on the basis of the hospital's per diem cost, for up to 14 days per confinement.

The original $500,000 per year appropriation, however, is not enough to continue payments to hospitals on this basis. According to the estimate of the Director of the Missouri Division of Welfare, a total of $2 million a year would be needed for this phase of the program.

The Committees recognize the financial situation of the state in regard to appropriations and taxation in the next biennium. They recognize that there will be requests for substantial appropriations for other worthwhile programs, both in health and other fields. They recognize that money payments to Old Age Assistance recipients are now close to minimum subsistence levels.

With consideration of these and other factors, in view of the need of hospitals to recover their expenses of providing care for patients, and with consideration of the magnitude of the appropriation needed, the Committees therefore recommend that the Association support the implementation of the Mills-Kerr Law specifically through encouraging the appropriation of sufficient additional state funds, which, with matching Federal money, will enable the continuance of payments under the program to hospitals on the basis of their per diem costs.

Statistics on the present situation in Missouri, a digest of the Mills-Kerr bill (Public Law 86-788) and implications for Missouri were presented.

After discussion, on motion of Dr. Furlow, duly seconded, that the recommendations of the Committees be accepted, changing the per diem cost of hospitals to "reasonable cost" was defeated by a vote of six to four.

On motion of Dr. Bull, duly seconded, it was voted to accept the recommendations as presented, by a vote of six to four.

HANDBOOK

On motion of Dr. Furlow, duly seconded, it was voted that the report and the recommendations be placed in the Handbook for Delegates.

CORPORATE PRACTICE

Dr. Muether presented the following report of the Committee on Corporate Practice:

Pursuant to the action of the House of Delegates at the 1960 Session, the special Committee on Corporate Practice during the year has attempted to initiate the wide-scope study of corporate practice in Missouri envisioned in last year's report of the Committee to the Council and the House.

This study was to encompass such elements as the extent, patterns and trends of corporate practice in the state, the impact of such practice on patients, institutions and medical practitioners and identification of particular instances of corporate practice actually in existence.

The intent was to engage an outside research organization experienced in social research to undertake the study.

A number of research organizations have been investigated in the past months, with disappointing results.

Typical of these was a nationally known research firm in St. Louis which decided that such a study would not be feasible for its organization to undertake since the skills and experience called for are unusual and not readily available to them.

Other types of organizations were also contacted, including those in the accounting and management fields. These in general felt that they could not make such studies for the Association without concurrent invitations from the governmental bodies, institutions and organizations which might be involved.

While university social science groups had also been suggested as possibilities in undertaking the study, there is doubt on the part of the Committee that such an agency could effectively be utilized.

Through these experiences, it has now become the sense of the Committee that the best way to proceed is to invite directly the views of the members of the staffs of certain of the institutions felt to have elements of corporate practice in their activities as to what patterns and degrees of corporate practice are compatible with the private practice of medicine.

Preliminary work has been done toward this end, and the Committee is prepared to launch this phase of study in the near future.

In discussion, two legal cases involving corporate practice, one in 1907 and a more recent one in Iowa were recounted; the difficulty in the definition of what is corporate practice; the involvement only of the cities and not the rural sections of Missouri; and that probably a court definition of "corporate practice" would be necessary before real work could be done by the committee.

On motion of Dr. Stricker, duly seconded, the report was accepted.

MISSOURI HOSPITAL ASSOCIATION

A meeting with representatives of the Missouri Hospital Association was reported. Those present representing MSMA were: Drs. Muether, Hollweg, Summers and Mr. O'Brien.

It was reported that discussions had been rather general and concerned possible legislation which may be presented to the legislature.

LEGISLATION

Three bills that have been introduced in the House of Representatives were reported: H.B. 6, establishing a Commission on Aged, consisting of 15 members; H.B. 83 establishing compulsory commitment of persons with tuberculosis (which has been introduced in several legislatures but has not passed); and H.B. 133 on chiropractic.

Information was presented on proposed bills, not yet introduced, to create a monopolistic state fund for Workmen's Compensation and one on provision of a state fund Temporary Disability Law, explaining the meaning of such legislation. The possibility that these acts may be presented have been brought to the attention of the Committee on Industrial Health.

UNIVERSITY BUDGET

Mr. O'Brien read a letter from Dr. Wilson setting forth information concerning the budget requested by the University of Missouri School of Medicine. Dr. Wilson discussed the problem further pointing out that the hospital could lose accreditation, that if beds should have to be closed it would influence the number of students that the medical school could take.

It was stated that a newsletter on legislation would go to all members in the near future and that information about the medical school needs would be included.

ANNUAL SESSION

Dr. Matthews spoke briefly concerning the program and special events of the Annual Session and gave the list of special guests.

PUBLIC SERVICE

Dr. Muether presented the following report, together with figures on advertising costs:

Public Service Program

It will be recalled that the 1960 House of Delegates adopted a resolution providing that "the Council be authorized and instructed to institute immediately an intensive program of public relations emphasizing the positive programs of the medical profession . . . and that each county medical society be urged to take immediate measures to institute on a local level through local press media an educational advertising program emphasizing the guarantee of Missouri physicians that no individual in this state shall be without the services of a doctor for the lack of financial resources."

At its meeting on the final day of the 1960 annual session the Council acted immediately to implement this resolution. An initial budget of $15,000 was appropriated to launch the new program, and a special committee of Council members was appointed under the chairmanship of Dr. Muether to set policies and guide the work. Members of the special Public Service Committee were, in addition to the chairman, Drs. Furlow, Summers, Tillman, Doyle, Hollweg and Dowell.

In practice, however, the entire Council at its regular meetings supervised all developments in the Public Service Program. These are summarized below.

The two essential elements of the resolution as adopted were: (1) The assumption that the doctors of medicine as a whole were as a matter of fact holding out a guarantee of medical service to all without regard to payment and (2) the assumption that they would wish to publicize this guarantee locally by advertising.

The two first steps taken by the staff were to explore these two assumptions. Some 30 or 40 physicians, largely in rural areas, were interviewed at length. It at once became apparent that individual practicing doctors had little enthusiasm for making an advertised guarantee of the availability of their free service. Two staff members visited the A.M.A. in Chicago to find what had been done by other state and local societies in this general area. A detailed study was also made of advertising media and costs.

On the basis of the staff's analysis of the situation in the light of the above studies, the Public Service Committee determined that the basic objective of the resolution—namely, to win a public opinion more favorable to the medical profession in the state—could not be achieved by the direct and immediate means proposed in the language of the resolution. First, it seemed clear most doctors did not favor advertising a blanket guarantee of service. Second, the cost of advertising to do an effective job would have been beyond the means of most local societies and equally beyond the resources of the state association.

It was, therefore, determined by the committee and the staff to see how the purposes of the resolution might be achieved by other means. As a basic guide, they adopted the essential principle that any plan aimed at publicizing "the positive programs of the medical profession" had to be based on real news of real programs, and that such programs had to be acceptable to individual county societies.

The immediate next step was to ask each county society in the state to appoint a public service committee of its own, through which the state committee might transmit for local consideration suggestions and programs for activities that would lay a foundation for constructive publicity to influence public opinion. Of the 52 societies in the state, 26 appointed such committees. At the same time, publicity activities at the state level were increased to the maximum possible, pending the fuller development of the program.

The objectives and elements of the program were restated to be: Increase public awareness of the profession's promotion of better health care; strengthen public realization that physicians' services are available to all and available in emergencies; emphasize the efforts of the profession to assure adequate numbers and distribution of physicians; increase public recognition of the efforts of the profession to assure adequate care for the indigent and the aging.

The following steps were taken to implement the program as thus redefined:

1. *Publicity.* News releases, generally very well received, were made on the honor medical student awards, the Missouri University preceptorship program, the A.M.E.F. campaign, the new student loan fund, the annual meeting of the Woman's Auxiliary, as well as a detailed account of the over-all Public Service Program for MISSOURI MEDICINE.

2. *Program materials.* For the reference of local society public service committees, materials were assembled from the A.M.A. and other sources outlining possible ways to set up and operate an emergency call system and a guarantee of service program at the community level. A.M.A. materials describing constructive national programs of medicine were screened for wider use in physicians' waiting rooms.

3. *Indigent care studies.* With the cooperation of local society public service committees, questionnaire surveys were made of provisions and facilities for indigent and medically indigent patient care in the following counties (the studies were relatively extensive in the case of those first listed, and, as might be expected, relatively simple in the others): Adair, Boone, Clay, Clinton, Greene, Howard, Jasper, Pettis and St. Louis County. Also Crawford, Dallas, Henry, Hickory, Knox, Marion, Monroe, Montgomery, Nodaway, Polk, Putnam, Schuyler, Sullivan and Texas.

In general, these studies make it clear that much can be done at the local and community level—with increased application of county funds—in order to achieve significant improvements in local arrangements for the adequate care of the indigent, medically indigent and the aged.

4. *Directory of Health Resources.* Detailed working plans have been completed, and the Woman's Auxiliary has undertaken the important task of assembling detailed information on the availability of all facilities, finances and services for health care in all areas of Missouri. When this work is complete, we shall have an excellent over-all picture of where the real problems are, and every physician will have a handy manual for his guidance in referring patients in need of particular kinds of care or help.

5. *Student loan fund.* At its May, 1960, meeting the Council voted an appropriation of $25,000 to establish a fund for loans to medical students who are residents of Missouri. Such a plan had been discussed originally in February, 1960, and it was felt that this would be an important element in the over-all Public Service program. The Council has supplemented its initial grant of $25,000 to the fund by a second grant of the same amount. A questionnaire survey has been made of all other student loan funds supported by organized medicine in the state, and the suggestion was made to local society public service committees, in the three societies which have funds in existence, that they increase efforts to publicize their programs.

Conclusion for Consideration of the House of Delegates

At its December meeting, the Council considered the over-all policy of the Association in regard to care for the aged and the indigent in the light of the newly enacted Mills-Kerr law and pending legislation of the Forand type in Congress.

For consideration both of policy and of cost, the Council voted to discontinue the Public Service Program as such, though more intensive efforts in the area of publicity are to continue as is the Auxiliary's work in compiling the Directory of Health Resources. The Association's support of the student loan fund has been increased. Local society public service committees continue in existence.

The budget provision for public relations services has been reduced to the $9,000 yearly figure that was in effect before the initiation of the Public Service Program. In the months that the program was fully active, expenditures for public relations services were authorized at an annual rate of twice this figure. The total cost of the Public Service Program from the last annual session through December, 1960, was $9,590.21, including all fees and expenses.

This detailed report to the House aims to make it clear to delegates how elements of the Public Service Program evolved and how the program was carried forward in response to the resolution of the House last year.

The situation now appears to be this: If there is to be a major public relations effort to improve public understanding of the medical profession in Missouri, there will need to be definite action programs at both state and local levels. Something can be done with publicity alone based on our existing programs.

If more public relations effort is to be worthwhile, however, it must be based on further soundly conceived action programs by which organized medicine in the state will take the lead in improving facilities and arrangements for indigent care and in urging more adequate financial support at the county level.

In the long run it is certain that, if care for the indigent and aged is paid for more and more by state and, then, Federal government, the trend is bound to continue away from the practice of medicine as we know it. The only ultimate solution is for the local community, the family, neighbors and local government to take on the job.

The question for the House is to consider whether it is the task of organized medicine in Missouri to try to lead a trend back to local responsibility; whether it is practical to try to do so now that the opposite trend has gone so far; whether the now discontinued Public Service Program was headed practically speaking in the right direction; whether any real results could be expected from this program or any like it; whether MSMA and local societies can afford the money it will take, and, finally, whether individual doctors can afford the time or give the interest and the effort on which the success of any such program must ultimately depend.

On motion of Dr. Tillman, duly seconded, the report was adopted.

WHITE HOUSE CONFERENCE

Drs. Peterson and Hardwicke reported on the White House Conference on Aging. They explained that there were 10 groups with subjects for discussion and that medical care was never considered as a separate item and that doctors were not really given a chance to be heard. There were approximately 270 doctors in the conference, some representing other interests than the medical profession in general. It was said that in one small group a vote concerning legislation for the aged, 14 voted for care to come under Social Security and 10 against, and in a larger group the vote was 170 to 99.

Dr. Peterson had been assigned to the section on "Income Maintenance" and Dr. Hardwicke to the section on "Medical Care." Dr. Peterson said that he would present a further report when he had had time to prepare it.

On motion of Dr. Muether, duly seconded, Drs. Peterson and Hardwicke were thanked for their efforts and reports.

VENEREAL DISEASE

Dr. Neilson presented the following report for the Committee on Control of Venereal Disease:

Committee on Control of Venereal Disease

The Committee on Control of Venereal Disease met at the Missouri Hotel, Jefferson City, January 11, 1961. Members in attendance were: Drs. E. M. Powell, Robert Bristow, A. W. Neilson, and E. M. Cannon. Others in attendance were: Drs. E. A. Beldon, William Meinershagen, J. P. Russell, Mr. Tom Dundon, Mr. Wilson Corcoran, Division of Health; Mr. Ray McIntyre of the State Medical Association staff and Dr. Hollis Allen of the Committee on Laboratory Medicine of the Association.

The reporting system on positive VDRL tests from private laboratories by number was discussed. Dr. Allen and the members agreed that the laboratories had no increased difficulty, other than the actual work of sending the reports. There were 174 private laboratories reporting. The State Health Department stated that in general it was pleased in that although the number of positive reports was lower, 65 per cent were cases that had not been previously reported, 25 per cent were previously reported, and 10 per cent were false positives. The disadvantages of the number system to the State Health Department were: (1) The difficulty of carrying out a follow-up and epidemiological study where only a number is used for identification. If the private physician has already filed this number on the patient's record it is left to his memory. (2) The inability to check repeated positive serology on the same person, therefore making the statistics inaccurate and added work and bother in attempting to follow-up on the same patient. Because of these disadvantages a motion was made by Dr. Neilson and seconded by Dr. Bristow that a pilot study be set up in St. Louis, using both name and number. This was to be presented to the St. Louis Medical Society for its approval by Dr. Neilson and Dr. Cannon.

The question was raised as to what procedure was used in patients with positive serology who were out of state. The Committee was assured by the Health Department that the same procedure would be followed as with in-state patients, and that no follow-up study would be made without the approval of both the consulting and referring physician.

The question was raised of the percentage of false positive examinations. Dr. Allen and Dr. Neilson discussed the VDRL as being a valuable screening test only, and Dr. Allen stated that in his laboratory a positive VDRL is followed by a Kahn and if necessary a Reiter fixation before a positive report is submitted. Dr. Neilson recommended, seconded by Dr. Bristow, that Dr. Allen submit a proposal to the Committee on Laboratory Medicine of the Association that this be a routine procedure in order to avoid as nearly as possible the false positives that can occur with this test.

The question of the premarital VDRL was discussed. A recommendation from Dr. Shapiro of the St. Louis Health Department was read. The number of cases which were reported by the Health Department was listed. In 1960 there were 36,000 serologies submitted with a reactive rate of 8 per cent. The Committee would like to bring to the attention of the Council that it feels the present premarital law is inadequate and that the signature of the local physician should accompany the result of the serology. This recommendation was made because many approved laboratories are not run by physicians. Many negative reports have the physician's name without his knowledge, and only by the actual doctor's signature can the reports be known to be accurate. This has an added advantage, that of contact by the physician for marriage counseling and guidance where needed.

It was also recommended to the Council by this Committee that it revise its stand and endorse the fee for treatment of syphilis on a limited basis in areas where conditions warrant it and where the local physicians desire it. On the recommendation of the Health Department, the Committee asked the Council last year to rescind this service. This has been found to be disadvantageous to the Health Department by lack of cooperation in the follow up of patients and the failure of some patients to receive treatment.

On motion of Dr. Muether, duly seconded, the report was adopted.

DELEGATES HANDBOOK

The material to be included in the Handbook for Delegates was discussed.

DELEGATES

Dr. Hampton asked that Councilors attempt to get counties in their districts to elect delegates early enough that they can become conversant with material to come up, also that they could be reported the sixty days before the session as is set out in the by-laws and which makes possible the selection of reference committees prior to the session. He also asked that material to be presented to the House of Delegates be presented prior to the time of the session. It was pointed out that the by-laws of some societies set the time for elections and earlier elections would have to await a change in those by-laws.

HONORARIUMS

Dr. Matthews spoke briefly on honorariums for guest speakers at annual sessions, saying that these were becoming more universal. He asked that the Council consider it and take action at the next meeting.

HEALTH FAIR EXHIBIT

The possibility of exhibiting at the Health Fair to be held in Kansas City, which had been discussed at the last Council meeting, was discussed further. It was estimated that the cost of the exhibit could go as high as $1,500.

On motion of Dr. Muether, duly seconded, it was voted that the Council appropriate not to exceed $1,500 for an exhibit at the Health Fair.

DONALD M. DOWELL, M.D., *Chairman*

County Society News

FIRST DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

BUCHANAN COUNTY MEDICAL SOCIETY

Dr. Thompson E. Potter addressed the monthly meeting of the Buchanan County Medical Society, January 4, in the Oak Room of Hotel Robidoux.

Dr. Potter's paper was on "Severe Extremity Fracture and Injury." The speaker used numerous x-rays to demonstrate the fractures and results and had several patients present for a clinical demonstration. He outlined methods of treatment for severe fracture and injury including extensive surgery, often needed, and the medical aspects involved. Dr. Potter's paper was discussed by Dr. Robert W. Augustine.

Dr. Judson M. Hughes, President of the society, presided. Forty St. Joseph and Northwest Missouri doctors attended the program.

WILLIAM B. ROST, M.D., *Secretary*

GRAND RIVER MEDICAL SOCIETY

Members of the Grand River Medical Society and their wives held a dinner meeting at the Strand Hotel in Chillicothe, January 12. Guests included Dr. and Mrs. Joseph Fisher, Dr. and Mrs. William Rost and representatives of the National and Misner Drug companies and their wives.

Following the dinner, Dr. Fisher of St. Joseph gave a graphic lecture on the effect of radiation on various body tissues both normal and abnormal. Emphasis was placed on the use of the newer radiation materials and technics in the treatment of far advanced skin cancers. Pictures taken before and after treatment showed that while beauty may not be skin deep restoration of an intact skin in such cases can have a dramatically esthetic effect.

At a pleasantly short business meeting Drs. Glennon A. Horner of Marceline and J. B. Titmarsh of Bethany were added to the membership. Delegates and alternates for the State meeting in March were elected. Dr. Donald Dowell, First District Councilor, stated that those attending the meeting would be rewarded with an unusually good clinical program and reminded those present that not only the voting delegates but all members were welcome at the business sessions. Other matters pertaining to the State Meeting were discussed and the meeting adjourned.

The ladies of the Auxiliary held a separate meeting with part of their program being a fund raising auction.

FRANK R. DALEY, M.D., *Secretary*

SECOND DISTRICT

J. J. WIMP, COUNCILOR, KIRKSVILLE

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly, Thursday night, January 12.

The scientific program was presented by members of the local society with the program consisting of the presentation of some interesting and unusual medical and surgical cases. These cases were as follow: Toxic goiter with radioactive iodine; a recurrent dislocated kneecap with intricate repair; an unusual tumor of the lower abdomen resulting from gall stones; a tendon transplant from the right foot to the right thumb; an interesting pancreatic tumor and two cases of purpura.

At the business part of the program the society elected Delegates and Alternates to the Missouri State Medical Association meeting in Kansas City, Mo., March 19-22.

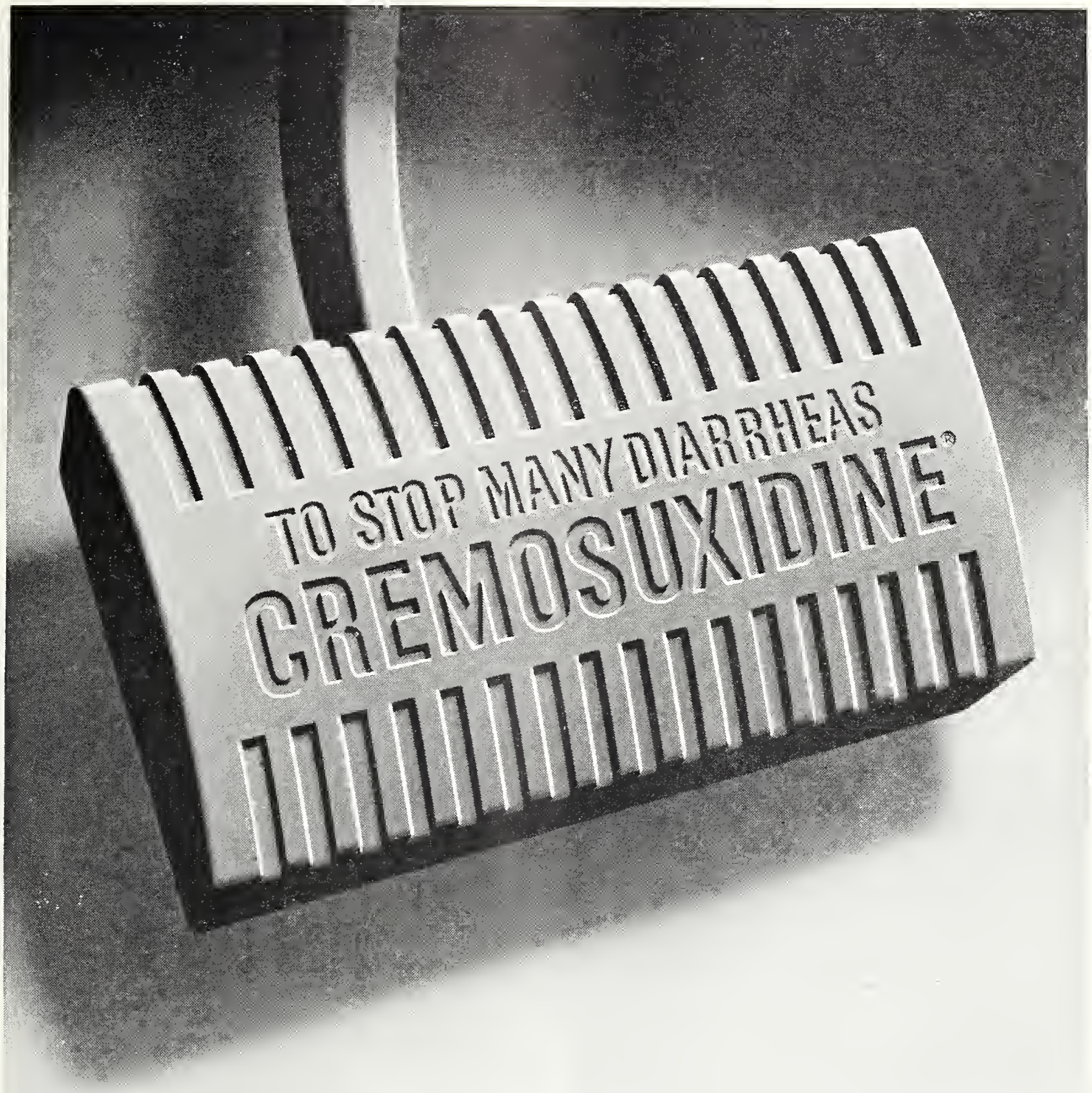
Members present at the meeting were: Drs. Thomas S. Fleming, J. Will Fleming, Jr., C. C. Cohrs, C. C. Smith, Avery P. Rowlette, D. W. Chute, L. E. Huber, Josephine Baker, R. H. Young and Stanley R. Szymanski, Moberly; F. A. Barnett, Paris; P. V. Dwyer, Huntsville; F. L. Harms, Salisbury; and Howard Miller, Carl Rinker, James Campell and Donald Eggleston, Macon.

Two guests in attendance were Dr. Leopold Lachance of Centralia and Dr. Richard Johnson of Columbia.

J. W. FLEMING, M.D., *Secretary*

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY

Twenty-three physicians were present to hear an outstanding scientific program presented to the Marion-Ralls-Shelby County Medical Society



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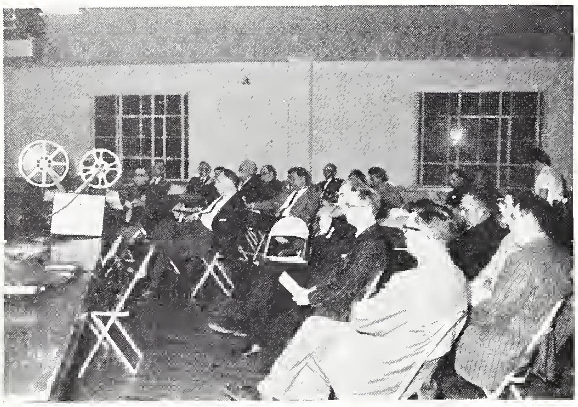
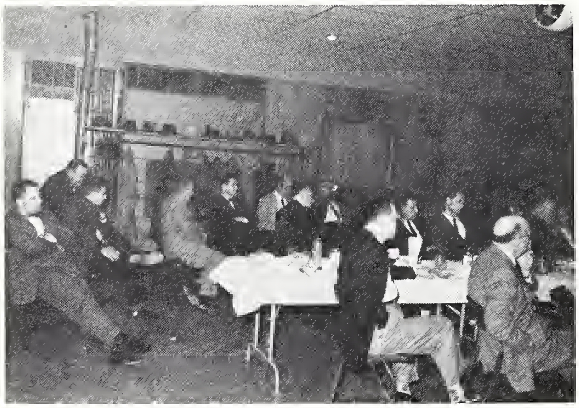
in Hannibal on Tuesday night, January 17. This particular program consisted of the showing of a teaching film entitled "Still Going Places." The film has to do with the active management of disability in the aged. It concerns primarily the rehabilitation of a hemiplegic. The general theme however is one of physical and psychologic rehabilitation. It is a worthwhile film and its message was strengthened considerably by Donald Rose, M.D., Director of the Department of Physical Medicine, Kansas University Medical School, who served as discussant. He pointed out many things that they were doing along this line at the KU Medical Center and stressed definite things that can be done in local situations by doctors of medicine in their daily practice. His discussion was definitely an inspiration to all and a definite help in problems related to rehabilitation.

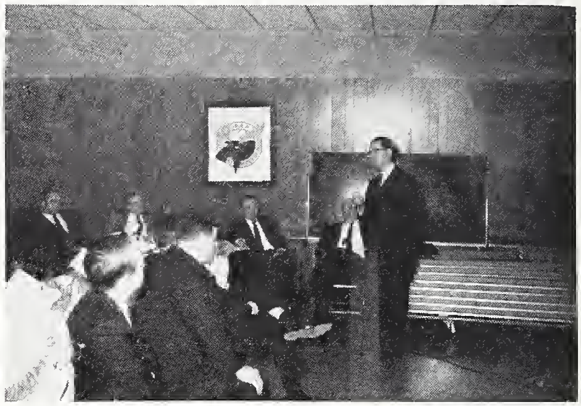


A film was presented as a part of the program.



"Still Going Places" dealt with rehabilitation.

This program was the second in a series of three teaching film presentations before this Society under the auspices of the American Academy of General Practice Commission on Education Film Committee and the Education Committee of the Missouri Academy of General Practice.



Dr. Rose acted as moderator for the film.

David Ruhe, M.D., Department of Medicine and Director of the Audio-Visual Department at Kansas University Medical School, accompanied Dr. Rose to the meeting and made a number of pertinent remarks concerning the use of teaching films in postgraduate medical education. Mr. Ray McIntyre, Field Secretary of the State Medical Association, was present to observe the program and incidentally to show the film. Following the conclusion of this excellent program, a business session was held with a number of important local Society matters discussed.

Wyeth Hamlin, M.D., *Secretary*

SIXTH DISTRICT

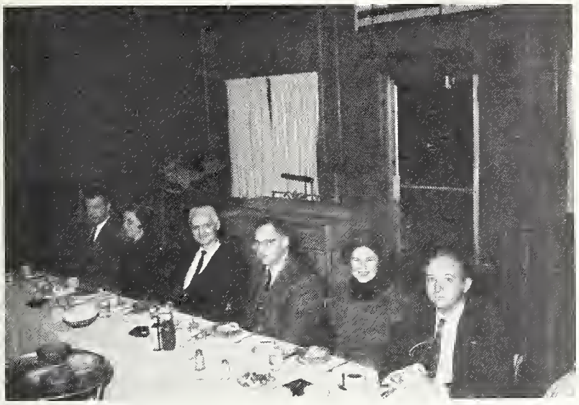
O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry, Johnson, Pettis, Saline, Lafayette-Ray County Medical Societies

Despite an evening of inclement weather, 50 people including doctors, their wives, and guests attended a joint dinner meeting of the Henry, Johnson, Pettis, Saline, Lafayette-Ray County Medical societies at the Pacific Cafe in Sedalia on Wednesday night, January 25.

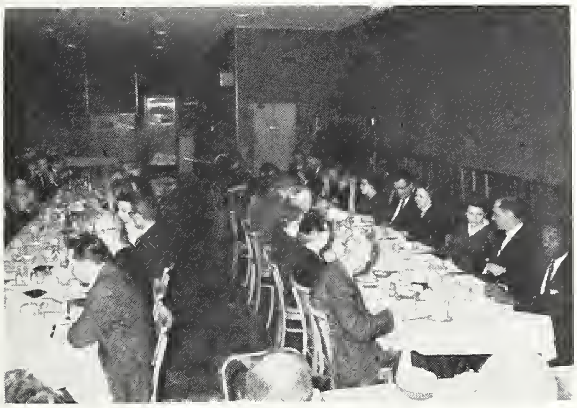
The evening festivities began with a social hour which gave all late arrivals sufficient time to be present when an excellent steak dinner was served.

Following the dinner the ladies retired to their own meeting while the doctors remained to hear a fine discussion by Vernon E. Wilson, M.D., Dean, University of Missouri Medical School,



Speakers and officers sat at the head table.

on "The Future of Your Medical School." Dr. Wilson pointed out that the school was still adding to its faculty which he feels is now second to none in the land and the teaching hospital is now in full operation. All of this he pointed out cost money and that the medical school, to maintain its full accreditation, will need an increase in state appropriations for the next biennium. His discussion was clear, concise and interesting and gave to all present a much better understanding of the splendid facilities now in operation at Columbia for the benefit of the health care needs of the people of Missouri.



Dinner preceded the meeting.

The speaker held the close attention of the audience.

Mr. Ray McIntyre, Field Secretary of our State Medical Association, discussed a number of matters which will come before the House of Delegates at the Missouri State Medical Association meeting in Kansas City, March 19-22. He also distributed preliminary programs for the coming state meeting and made a plea for a high percentage of attendance of the doctors in this area.

T. Spencer Hopkins, M.D., *Secretary*

West Central Missouri Medical Society

The regular meeting of the West Central Missouri Medical Society was held in the Wagon Wheel Cafe, Harrisonville, Thursday evening, January 12. A social hour preceded dinner with the usual visitation among the members, guests, and their wives.

The scientific program for the evening was presented by Dr. Charles S. Cooper, internist of Kansas City, who presented "The Treatment of Arthritis." Dr. Cooper presented his subject completely, dealing particularly with gout and rheumatoid arthritis. He specifically spoke about treatment, touching on the use of cortisone drugs, and also upon gold therapy which he has found to be satisfactory. His talk brought forth numerous questions and discussion which is certainly the earmark of a well presented subject.

Dr. O. B. Barger, Harrisonville, Councilor for our district, brought up points on medical legislation which are due to come before Congress and also mentioned some of the matters to come before the next meeting of the State Association in March.

Dr. Basil O. Hartwell, Drexel, who has reached his 70th birthday, asked the Society to place him upon an honorary membership basis. Such motion was made and seconded and passed by those present and the secretary was ordered to present the action on his request to the state office.

We were happy to have five of the doctors and wives from the Richards-Gebaur Air Base at Belton with us. Their presence added much to our attendance. We were pleased to have them as our guests and hope they will visit us again at any time they can.

Those present were Dr. and Mrs. Rolla Wray of Nevada; Dr. H. A. Tracy and wife of Belton;

Dr. and Mrs. Robert Brownsberger, Appleton City; Dr. and Mrs. Jack Moody, Dr. and Mrs. O. B. Barger, Dr. and Mrs. Edwin Jones of Harrisonville; Dr. N. Masser and Dr. C. W. Luter of Butler. Our doctor guests from the Air Base were Dr. Emerson Flurkey, Dr. and Mrs. Warren Koontz, Dr. and Mrs. Dwight Newton, Dr. and Mrs. M. Field, Dr. and Mrs. Lewis Ornesby, and our guest speaker, Dr. Charles S. Cooper and his wife of Kansas City.

It is hoped that all members of the society this January 1, made one New Year's resolution to the effect that they would, in this year, plan and attempt to attend more meetings than they did in 1960.

Motion was made, seconded and passed to omit the March meeting due to the closeness of the date with the meeting of the State Association. Our next meeting will be in Nevada in February and the next meeting after that will be at Butler Inn Hotel, the second Thursday in April.

Carter W. Luter, M.D., *Secretary*

EIGHTH DISTRICT

W. W. TILLMAN, COUNCILOR, SPRINGFIELD

Greene County Medical Society

The annual business meeting of the Greene County Medical Society and the Greene County Medical Society Foundation was held Friday, December 23, 1960, at the Holiday Inn with 51 members and one guest present. The President, Dr. Walter W. Tillman, presided.

Upon motion by Dr. Bonebrake, seconded by Dr. Moseley, the minutes of the November meeting were approved as published in the *Bulletin*.

Upon motion by Dr. Maple, seconded by Dr. Lockhart, the annual report of the treasurer was approved by the membership.

Dr. Tillman reviewed the report of the nominating committee as presented at the November meeting of the society and requested further nominations from the floor. There were no additional nominations and upon motion by Dr. Cochran, seconded by Dr. Gentry, the by-laws were waived and the secretary instructed to cast a unanimous ballot for the nominees presented by the nominating committee at the November meeting. These were: Dr. Stanley S. Peterson, president-elect, to serve as president in 1962; Dr. F. T. H'Doubler, Jr., secretary; Dr. William F. Johnson, treasurer; Drs. James T. Brown and H. B. Ivy, three year terms on the executive council; Dr. Kenneth E. Knabb, two year term on the council to fill the unexpired term of Dr. Stanley Peterson; Drs. John Ferguson, Stanley Peterson and Kenneth E. Knabb as Delegates to the Missouri State Medical Association and Drs. Harry Silsby, F. T. H'Doubler, Jr., and Bruce Lemmon, Jr., as alternate delegates to the Missouri State Medical Association. Drs. T. E. Atkinson, Guy D. Callaway, Jr. and John Westerfield Williams were elected to serve as members at large on the nominating committee with the three past presidents, Drs. Tillman, Siceluff and Elkins. Upon unanimous vote, the president declared these officers duly elected to serve the Society and the Greene County Medical Society Foundation.

The election of officers being declared duly completed, the president asked the new officers of the Society to stand for recognition.

Dr. Tillman brought to the attention of the membership, the article by Dr. Ned White which appeared in the November 26, 1960 *Journal of the American Medical Association* on a physician's responsibility to community activities.

As recommended by the executive council for the Greene County Medical Society and the board of directors of the Greene County Medical Society Foundation meeting in regular session Wednesday, December 7, 1960, and published in the December *Bulletin*, the president recommended that Article V of Articles of Agreement of the Greene County Medical Society Foundation be amended to provide that upon dissolution of the Foundation, all assets of the Foundation be distributed to other non-profit organizations which qualify for exemption from federal income taxes as organizations described in the Internal Revenue Code 1954, Section 501 (c) (3). Upon motion by Dr. Brown, seconded by Dr. Knabb, this amendment to the Articles of Agreement of the Greene County Medical Society Foundation was approved unanimously.

The president asked the secretary, Dr. H'-Doubler, to read the annual report of the board of trustees of the Endowment Fund due to special recommendations contained herein. This report was as follows:

"Attached is the Annual Financial Report for the Trust and Endowment Fund of the Greene County Medical Society which reveals we now hold cash, United States Treasury Notes, Savings Bonds and Treasury Bonds with current value of $9,995.48 and a maturity value of $10,879.58.

"Periodically, over the past several years, members of the society have discussed the possibility of placing this money with the Greene County

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ANALGESIC — ANTIPYRETIC	
Aspirin	150 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
ANTIHISTAMINIC	
BRISTAMIN (phenyltoloxamine citrate)	25 mg.

Dosage: Adults: 2 capsules 3 or 4 times a day for 3 to 5 days.
Children: 6 to 12 yrs.: One-half the adult dose.
Supplied: Bottles of 24 and 100 capsules.

According to a report by the Council on Drugs of the American Medical Association,* antibiotics may be administered for prophylaxis against secondary bacterial invaders in the following types of patients with influenza: pregnant women; debilitated infants; older individuals; patients being treated for other bacterial infections with chemotherapeutic agents, and patients with chronic, nonallergic respiratory disease.

*Council on Drugs, J.A.M.A. 165:58 (Sept. 7) 1957.

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Medical Society Foundation so that it might be better used as additional funds for scholarships and loans to medical students through the procedures established by the Record-Scholarship Committee and approved by the Council.

"It is our belief that it will be many years, if ever, before it becomes practical for this society to own a building as was originally intended when this fund was established. It is also our belief that this money would better serve the medical profession and the members of this society, as well as deserving medical students, if it were made available to the Record-Scholarship Committee as additional money to loan to medical students they may designate.

"It is, therefore, our recommendation that the money now held by the Trust and Endowment Fund be loaned, on an interest-free basis, to the Greene County Medical Society Foundation for purposes of granting loans to deserving medical students.

"We further recommend that the Council either endorse or reject this suggestion but that, in either case, it be presented to the membership of the society at the December 23, 1960 Annual Business Meeting of the society for their action."

The report was signed for the Board of Trustees by Dr. Walter S. Sewell, Chairman, Mr. Welter S. Pettit, Dr. H. A. Lowe, Sr., Mr. Flavius Freeman and Dr. Urban J. Busiek. Upon motion by Dr. Callaway, Sr., seconded by Dr. Anthony, this report and recommendation were unanimously approved by the membership.

The president then called for the annual reports of officers and Dr. F. T. H'Doubler, Jr. presented the annual report of the president.

Dr. Tillman then moderated a panel discussion of committee chairmen outlining the Society's activities for the year.

When new business was called for, Dr. Glenn Turner urged members of the Society to review the periodicals that they are placing in their waiting rooms with a purpose of critically analyzing material being published regarding the medical profession.

Dr. Guy Callaway, Jr., urged the membership to give active support to the Mills-Kerr approach for medical care of the aging.

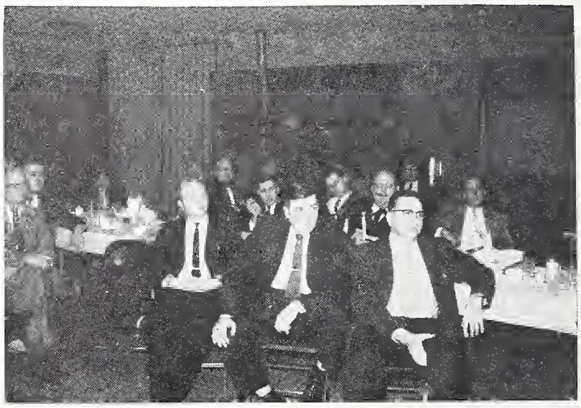
Dr. Tillman then introduced Dr. John P. Ferguson, incoming president, and Dr. Ferguson briefly addressed the membership, expressing the Society's appreciation to Dr. Tillman for his leadership during the past year.

There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

Ozarks Medical Society

The January meeting of the Ozarks Medical Society and the doctor's wives was held at the American Legion Hall in Monett on Tuesday night, January 10. The evening festivities began with the usual social hour followed by dinner. A business session of the Society was held preceding the special scientific program. Following dinner the ladies retired for a separate meeting.



The audience was interested.

The scientific program presented to the doctors was a continuation of the pilot film program under the auspices of the Film Committee of the Commission on Education of the American Academy of General Practice, in cooperation with the Missouri Academy. This was the second film presentation of the series of three to be given before this Society. The teaching film which was shown was entitled, "Inflammatory Diseases of the Eye."

Drs. Spalding, Donley, Almond and Buesseler confer.

Following the showing of the film further discussion of the subject was given by John A. Buesseler, M.D., Associate Professor and Chief of Ophthalmology at the University of Missouri Medical School in Columbia. His discussion brought forth numerous questions and with the combination of the points shown by the firm and those covered by Dr. Buesseler, this program was made quite practical and instructive. Accompanying Dr. Buesseler from Columbia to our meeting were Dr. Almond, Assistant Professor of Surgery, and Dr. Spalding, Resident in Ophthalmology at the University.

Mr. Ray McIntyre, Field Secretary of the State Medical Association was also present and served as movie projectionist. Twenty-five doctors were present to enjoy the evening's presentation.

FRED BROWN, M.D., *Secretary*

TENTH DISTRICT

BEN M. BULL, COUNCILOR, IRONTON

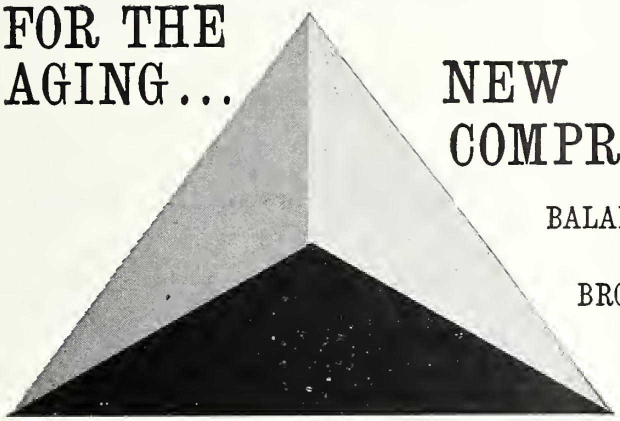
MINERAL AREA COUNTY MEDICAL SOCIETY

Harry C. Morgan, M.D., Department of Orthopedic Surgery, Washington University Medical School, St. Louis, presented an interesting program to the Mineral Area County Medical Society on Thursday night, January 19. The meeting was held in the Clinic Building of the State Hospital in Farmington.

Dr. Morgan spoke on "Gunshot Wounds." Increasing numbers of such wounds are being seen in this particular area. Those in attendance were privileged to hear an interesting and practical discussion of a current local problem.

GEORGE L. WATKINS, M.D., *Secretary*

Have your reservations
been made?
for the
103rd ANNUAL SESSION
MISSOURI STATE MEDICAL
ASSOCIATION
March 19, 20, 21, 22, 1961
Hotel Muehlebach
Kansas City



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MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

Fourteenth Annual Convention

Hotel Muehlebach
Kansas City, Missouri

March 19, 20, 21 and 22, 1961

TIME AND PLACE OF MEETINGS

Sunday, March 19, 1961

10:00 a.m. Board of Directors Meeting, St. Joseph Hospital.
1:30 p.m. Registration, Rossiter Hall Auditorium, St. Joseph Hospital.
2:00 p.m. Business Meeting, Missouri Society of Medical Technologists, Rossiter Hall Auditorium, St. Joseph Hospital.
6:30 p.m. Buffet Supper, St. Joseph Hospital.
8:00 p.m. Business Meeting, Missouri Association of Blood Banks, St. Joseph Hospital.

Monday, March 20, 1961

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
9:00 a.m. Scientific Session, Presented by the Missouri Association of Blood Banks, Rooms 471-473.
12:00 noon Lunch.
2:00 p.m. Scientific Session, Rooms 471-473.
3:05 p.m. Coffee Break.
3:25 p.m. Scientific Session, Rooms 471-473.
5:00 p.m. Adjournment.
6:30 p.m. Social Hour, Golden Ox Restaurant.
7:30 p.m. Annual Banquet Sponsored by the Missouri Society of Clinical Pathologists, Golden Ox Restaurant.

Tuesday, March 21, 1961

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
8:55 a.m. Scientific Session, Rooms 471-473.
10:10 a.m. Coffee Break.
12:30 p.m. Lunch.
2:00 p.m. Tour Midwest Research Institute, 425 Volker.
2:00 p.m. Workshop: Radio-Isotopes in the Clinical Laboratory, St. Mary's Hospital, 101 Memorial Drive.

Wednesday, March 22, 1961

8:00 a.m. Registration, Hotel Muehlebach, Rooms 471-473.
9:00 a.m. Scientific Session, Rooms 471-473.
10:00 a.m. Coffee Break.
10:15 a.m. Scientific Session, Rooms 471-473.

SCIENTIFIC SESSION

Muehlebach Towers, Rooms 471-473

Monday, March 20, 1961

Morning Session

Presiding: Lula Mims, MT(ASCP), BB, St. Louis
Alternate: Ruth Neseth, MT(ASCP), BB, Kansas City

8:00 a.m. Registration, Muehlebach Towers, Rooms 471-473.
9:00 a.m. Invocation, Edward L. Weinrich, A.B., M.A., B.D., Minister, University Heights Christian Church, Kansas City.
9:05 a.m. Address of Welcome, L'Nora Wells, MT(ASCP), Columbia.
9:10 a.m. The Subgroups of A, Leo P. Cawley, M.D., Clinical Pathologist and Associate Director of Laboratories, Wesley Hospital, Wichita, Kansas.

It is now recognized that blood group antigens differ within narrow groups such as A which has variants consisting of A_1, A_2, A_3, A_m, A_x, (A_o, A_4, etc.). It remains to be decided if these differ on the basis of quantity of antigen or quality of antigen.

Put your low-back patient back on the payroll

Soma relieves stiffness
–stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (J.A.M.A. Vol. 172, No. 18, April 30, 1960.)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey

9:35 a.m. The Use of Anti-Gamma and Anti-Non-Gamma Globulin Sera, William Pollack, M.Sc., A.B.C.S., F.I.M.L.T., F.R.M.S., Senior Scientist, Division of Diagnostic Research, Ortho Pharmaceutical Corporation (Research Foundation).

10:10 a.m. Coffee Break.

10:40 a.m. Detection and Identification of Atypical Antibodies, Edith L. Bossom, A.B., MT(ASCP), BB, Supervisor, Community Blood Bank of the Kansas City Area, Inc., Kansas City.

11:00 a.m. The American Association of Blood Banks Inspection and Accreditation Program, Angelo Lapi, M.D., Pathologist, St. Mary's Hospital, Kansas City, Regional Inspector, American Association of Blood Banks.

A discussion of the reasons for the inspection and accreditation program, the mechanism of carrying out inspection, some common shortcomings of inspected banks, a few problems common to inspeetor and banks and the reactions encountered.

11:20 a.m. Certification in Blood Banking, Russell Kerr, M.D., Pathologist, St. Joseph Hospital, Kansas City.

11:40 a.m. Workshop on Wheels, Beverly Jean Fiorella, B.S., MT(ASCP), BB, Chief of Bacteriology, St. Mary's Hospital, Kansas City.

An explanation of the need, function and aims of a mobile blood bank workshop. An actual experience with a workshop carried out in an outlying area in Missouri will be discussed.

12:00 noon Lunch.

Monday, March 20, 1961

Afternoon Session

Presiding: Marie Anderson, MT(ASCP), Springfield
Alternate: Bernadine Missel, MT(ASCP), St. Louis

2:00 p.m. Use of the Alkaline Phosphatase Stain on Peripheral Blood Smears, Marjorie S. Sirridge, M.D., Associate in Medicine, University of Kansas; Chief of Hematology, Providence Hospital; Consultant in Hematology, Wadsworth Veterans Administration Hospital, Kansas City, Kansas.

2:45 p.m. Film, Bone Marrow Aspiration, Henry Ford Hospital, Detroit, Michigan. Narration by Victor B. Buhler, M.D., Pathologist, St. Joseph Hospital, Kansas City.

3:05 p.m. Coffee Break.

3:25 p.m. Leukocyte Antigens and Antibodies, Mary E. Heckman, A.B., MT(ASCP), Graduate Student Teaching Assistant, Department of Microbiology, University of Kansas Medical Center, Kansas City.

Leukocytes must be considered as playing a dual role in that they are both blood cells and tissue cells. They not only possess antigens in common with erythrocytes and platelets, but also antigens specific for the leukocyte itself, and histocompatibility antigens that are not specific for the leukocyte but related to the particular genetic makeup of the individual. A brief review of the methods for separating leukocytes from whole blood and the technics for demonstrating the antigen-antibody reactions is presented. The clinical significance of these leukocyte antibodies in human disease is discussed.

3:55 p.m. Clinical Hematological Investigation—A Case Presentation, Victor B. Buhler, M.D., Pathologist, St. Joseph Hospital, Kansas City, Missouri.

5:00 p.m. Adjournment.

Monday Evening, March 20, 1961

Annual Banquet

Golden Ox Restaurant, 1600 Genessee

6:30 p.m. Social Hour sponsored by Aloe Company.

7:30 p.m. Banquet sponsored by the Missouri Society of Clinical Pathologists for members of the Missouri Society of Medical Technologists.

Master of Ceremonies: Frederick C. Coller, M.D., Pathologist, St. John's Hospital, Springfield.

Speaker: Jeramiah J. McElligott, Representative of American Telephone and Telegraph.

SCIENTIFIC SESSION

Muehlebach Towers, Rooms 471-473

Tuesday, March 21, 1961

MORNING SESSION

Presiding: Sister Robert Margaret, MT(ASCP), Kansas City
Alternate: Audrey Wines, MT(ASCP), St. Louis

8:00 a.m. Registration.

8:55 a.m. Academic Training for Medical Technologists, David Paretsky, Ph.D., Professor and Chairman, Department of Bacteriology, University of Kansas, Lawrence, Kansas.

So that medical technologists should be more than trained laboratory instruments, a broad education with stress on non-specialized topics is urged.

9:15 a.m. Fluorescent Antibody in the Clinical Laboratory, Cora M. Downs, Ph.D., Professor, Department of Bacteriology, University of Kansas, Lawrence, Kansas.

The use of fluorescent labeled antibody increases the rapidity of laboratory diagnosis by making the microorganism visible when viewed in the ultraviolet microscope. The antibody adheres specifically to the antigen and is made visible as the antibody fluoresces in ultraviolet light.

9:40 a.m. A Session with the Cestoda, Mary E. Larson, A.M., Assistant Professor of Zoology, University of Kansas, Lawrence, Kansas.

9:55 a.m. Parasitology Display, Mary E. Larson, A.M., University of Kansas, Lawrence, Kansas.

10:10 a.m. Coffee Break.

Reports on Three Micro Procedures in the Clinical Laboratory.

10:25 a.m. Plasmacrits, Jeannette S. Carter, Ph.D., MT(ASCP), Director, Bacteriology and Serology Departments, St. Joseph Hospital, Kansas City.

A capillary plasma flocculation test known as the Plasmacrit (PCT) screening test is discussed. The antigen used is a modification of the V.D.R.L. antigen. Choline chloride is substituted for heat as an "antihibitor," and plasma from the microhematocrit determinations is used for the test.

10:50 a.m. Micro L. E. Cell Preparations, Mary Margaret Kelly, B.S., MT(ASCP), St. Joseph Hospital, Kansas City and Mary I. Berkey, B.S., MT(ASCP), St. Joseph Hospital, Kansas City.

This paper will present a résumé of the more recent literature on methods of preparation for L. E. cell smears. The micro method of Lee, Mudrik and Davidssohn will be demonstrated.

11:10 a.m. An Evaluation of the Micro Prothrombin Time, Mary C. Abts, A.B., MT(ASCP), St. Joseph Hospital, Kansas City and Mary L. Burke, A.B., MT(ASCP), Directory of Laboratory, Raytown Clinic, Raytown.

The micro method for determining prothrombin time with capillary blood and oxalated plasma is discussed. Technical difficulties encountered, equipment used, both commercially purchased and that that may be devised in the small laboratory, are presented. A demonstration will be made. Comparison studies with the standard venous method will be included.

11:30 a.m. Forensic Toxicology, John P. Wyatt, M.D., Professor of Pathology, St. Louis University School of Medicine, St. Louis.

12:00 noon Radio-Isotopes in the Clinical Laboratory, L. R. Moriarty, M.D., Pathologist, St. Margaret's Hospital, Kansas City, Kansas; Irwin Joffe, M.D., Associate Pathologist, St. Mary's Hospital, Kansas City; Marian Winter, B.S., MT(ASCP), St. Mary's Hospital, Kansas City.

This presentation will be an introductory discussion of the nature and use of radioisotopes.

12:30 p.m. Lunch.

Tuesday, March 21, 1961

Afternoon Session

2:00 p.m. Workshop, Limit 16, Enrollment by Reservation Only.
Radio-Isotopes in the Clinical Laboratory: Demonstration of the Triiodothyronine Technique, L. R. Moriarty, M.D., Pathologist, St. Margaret's Hospital, Kansas City, Kansas; Irwin Joffe, M.D., Associate Pathologist, St. Mary's Hospital, Kansas City; Marian Winter, B.S., MT(ASCP), St. Mary's Hospital, Kansas City.

The workshop will be held at St. Mary's Hospital, 101 Memorial Drive, Kansas City.

2:00 p.m. Tour, Reservation Only.
Midwest Research Institute, 425 Volker.

SCIENTIFIC SESSION

Muehlebach Towers, Rooms 471-473

Wednesday, March 22, 1961

Morning Session

Presiding: Frances Fitzgerald, MT(ASCP), Kansas City
Alternate: Erline Spickard, MT(ASCP), Springfield

8:00 a.m. Registration.

9:00 a.m. Experiences With a Three Day Adrenal Gland Function Test, J. H. Hill, M.D., Pathologist, Trinity Lutheran Hospital, Kansas City.

Variation in urinary excretion of adrenal steroids associated with administration of ACTH permits the clinician to estimate the functional status of the adrenal gland cortex. The methods will be presented with a summary of results obtained in an average general hospital laboratory.

9:30 a.m. Renal Function, C. Thorpe Ray, M.D., Professor of Medicine, Chairman, Department of Medicine, University of Missouri School of Medicine, Columbia.

This presentation is a survey of various renal function tests with emphasis on physiology and clinical evaluation and usefulness.

10:00 a.m. Coffee Break.

10:15 a.m. An Improved Method for the Determination of Uric Acid in Blood, Marie H. Carr, M.A., MT(ASCP), Biochemist in Research, Veterans Administration Hospital, Kansas City.

The prevalent colorimetric procedures lack specificity and hence reliability, while the enzymatic methods employing uricase are complicated by technical problems arising from the ultraviolet absorption of serum protein. The method developed consists of passing the serum through an anion exchange column to remove protein and other u.v. absorbing materials. The uric acid is then eluted and determined by the change in u.v. absorption on incubation with uricase.

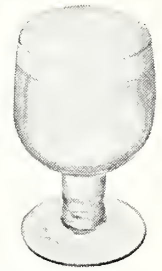
10:45 a.m. An Evaluation of Methods to Determine Blood Urea Nitrogen, Russell J. Eilers, A.B., B.S., M.B., M.D., Assistant Professor of Pathology and Director of Clinical Laboratories, University of Kansas Medical Center, Kansas City, Kansas.

An evaluation of four methods to determine BUN was undertaken. The methods were urease hydrolysis with direct Nesslerization, Conway micro-diffusion, Urograph, and automatic chemical analysis using the diacetyl monoxime reaction. A series of 50 pooled samples of plasma and serum providing a range of blood urea nitrogen levels from 10 to 150 mg. per cent were analyzed in duplicate by each of these methods. Discussion includes: a statistical analysis of the results, observations on the readability of the chromotographic strip, technologist time needed to analyze a batch of unknowns and significance of automation and Urograph-like tests to Laboratory Medicine today.

11:30 a.m. The Serum Creatinine and Creatinine Clearance Test as Measures of Renal Function, Perry W. Nadig, M.D., Resident in Urology, University of Kansas Medical Center, Kansas City, Kansas.

How to help your patient stick to a low calorie diet

The secret ingredient in a successful diet is acceptance. A low calorie diet that lets the patient work out equivalent variations will win his approval. A too-rigid diet begs to be broken. Pictured are dishes any dieter would find appetizing: chicken flavored with garlic, fruit-garnished gelatin, grapefruit, raw carrot, celery, pepper and radish nibbles. Variations might be broiled fish, simple green salads. All can be interestingly seasoned, attractively served, to keep the patient's enthusiasm from flagging.



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In search of a more accurate test of renal function, serum creatinine and creatinine clearance determinations were made on a large number of patients. The great usefulness of these tests and their superiority over other measures of renal function now in use will be discussed, as demonstrated by these studies.

12:00 noon Panel Question and Answer Session.
Moderator: Harold J. Grady, Ph.D., Associate Professor of Biochemistry, University of Kansas Medical Center, Kansas City, Kansas.
Panelists:
J. H. Hill, M.D., Kansas City.
C. Thorpe Ray, M.D., Columbia.
Marie H. Carr, MT(ASCP), Kansas City.
Russell J. Eilers, M.D., Kansas City, Kansas.
Perry W. Nadig, M.D., Kansas City, Kansas.

The areas discussed during the morning's session and related fields will be considered for panel discussion. Questions from the audience will be most welcome.

12:30 p.m. Adjournment.

Reservations must be made by March 12 and should be addressed to Miss Rachael Creager, Laboratory, General Hospital, Kansas City 8, Mo. Checks made out to Miss Creager should accompany all reservations, except hotel reservations which should be made directly with the hotel of choice.

Prices of the functions are: Buffet Supper, St. Joseph Hospital, 6:30 p.m., Sunday, March 19, $2.50; there is no charge for the social hour at the Golden Ox Restaurant at 6:30 p.m. on Monday, March 20, and members of the Missouri Society of Medical Technologists will be guests of the Missouri Society of Clinical Pathologists, but other guests will be charged $4.00; there is no charge for the tour of Midwest Research Institute at 2:00 p.m. on Tuesday, March 21, but reservations must be made; registration fee for the workshop on Radio-Isotopes at 2:00 p.m. Tuesday, March 21, will be $1.50 for members and $2.50 for nonmembers (no charge for pathologists or students).

Rates at Hotel Muehlebach run from $8.00 to $14.00 for a single room; $12.00 to $16.00 for two persons in a double room, and from $15.00 to $22.00 for a twin bedded room. Members should note that they are attending the meeting of the Missouri Society of Medical Technologists.

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Aristocort **Triamcinolone has long since proved its unsurpassed efficacy and relative safety in the therapy of *rheumatoid arthritis, inflammatory and allergic dermatoses, bronchial asthma,* and all other conditions in which corticosteroids are indicated. But ARISTOCORT has also opened up new areas of therapy for selected patients who otherwise could not be given corticosteroids. Medicine is now in an era of "special-purpose" steroids.[1]**

One outstanding advantage of triamcinolone is that it rarely produces edema and sodium retention.[1,2]

The clinical importance of this property cannot be overemphasized in treating certain types of patients. McGavack and associates[3] have reported the beneficial results with ARISTOCORT in patients with existing or impending cardiac failure, and those with obesity associated with lymphedema. Triamcinolone, in contrast to most other steroids, is not contraindicated in the presence of edema or impending cardiac decompensation.[3]

Hollander[1] points out the superiority of triamcinolone in not causing mental stimulation, increased appetite and weight gain, compared to other steroids which produce these effects in varying degrees. And McGavack,[2] in a comparative tabulation of steroid side effects, indicates that triamcinolone does not produce the increased appetite, insomnia, and psychic disturbances associated with other newer steroids.

ARISTOCORT can thus be advantageous for patients requiring corticosteroids whose appetites should not be stimulated, and for those who are already overweight or should not gain weight. Likewise, ARISTOCORT is suitable for the many patients with emotional and nervous disorders who should not be subjected to psychic stimulation. Furthermore, ARISTOCORT Triamcinolone, in effective doses, showed a low incidence of side reactions and is a steroid of choice for treating the older patient in whom salt and water retention may cause serious damage.[2]

References: 1. Hollander, J. L.: *J.A.M.A.* 172:306 (Jan. 23) 1960. 2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959. 3. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. Dosage should be individualized and kept at the lowest level needed to control symptoms. It should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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NEW MEMBERS

Raymond A. Christy, Jr., M.D., 1211 S. Glenstone St., Springfield, has become a member of the Greene County Medical Society. Dr. Christy is a native of Kansas, received his preliminary education in Kansas and his M.D. degree from the University of Kansas in 1954.

Virgil E. Flanders, M.D., Professional Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Flanders is a native of Kansas, received his preliminary education in Kansas and his M.D. degree from the University of Kansas in 1951.

William P. Hamilton, M.D., Aurora, has become a member of the Ozarks Medical Society. Dr. Hamilton is a native of Kansas, received his preliminary education in Kansas and his M.D. degree from the University of Kansas in 1957.

Richard W. Hollis, M.D., Professional Bldg., Springfield, has become a member of the Greene County Medical Society. Dr. Hollis is a native of Arkansas, received his preliminary education in Arkansas and his M.D. degree from the University of Arkansas in 1952.

Glennon A. Horner, M.D., Marceline, has become a member of the Grand River County Medical Society. Dr. Horner is a native of Missouri, received his preliminary education in Missouri and Arkansas and his M.D. degree from the University of Missouri School of Medicine in 1957.

Joseph E. Johnson, M.D., 5100 E. 24th St., Kansas City, has become a member of the Jackson County Medical Society. Dr. Johnson is a native of Texas, received his preliminary education in Texas and his M.D. degree from the University of Texas in 1959.

J. Tenbrook King, M.D., 4400 Nichols Parkway, Kansas City, has become a member of Jackson County Medical Society. Dr. King is a native of Kansas, received his preliminary education in Kansas and his M.D. degree from the University of Kansas in 1953.

Milford T. Kubin, M.D., Ellis Fischel Cancer Hospital, Columbia, has become a member of the Boone County Medical Society. Dr. Kubin is a native of Kansas, received his preliminary education in Kansas and his M.D. degree from the University of Kansas in 1929.

Albert G. Lewis, M.D., Main & Mill Sts., Smithville, has become a member of the Clay County Medical Society. Dr. Lewis is a native of Alabama, received his preliminary education in Alabama and his M.D. degree from Jefferson Medical College in 1945.

Fred V. Lucas, M.D., 807 Stadium Rd., Columbia, has become a member of the Boone County Medical Society. Dr. Lucas is a native of Colorado, received his preliminary education in California and his M.D. degree from the University of Rochester in 1950.

Glenn E. Roark, M.D., Student Health Service, Columbia, has become a member of the Boone County Medical Society. Dr. Roark is a native of Texas, received his preliminary education in Texas and his M.D. degree from the University of Texas in 1953.

Donald B. Rogers, M.D., Nixa, has become a member of the Ozarks Medical Society. Dr. Rogers is a native of New York, received his preliminary education in Missouri and his M.D. degree from St. Louis University School of Medicine in 1952.

Edward B. Shires, M.D., 3600 Troost Ave., Kansas City, has become a member of the Jackson County Medical Society. Dr. Shires is a native of New York, received his preliminary education in New York and his M.D. degree from Albany Medical College in 1940.

F. Gregg Thompson, III, M.D., 902 Edmond St., St. Joseph, has become a member of the Buchanan County Medical Society. Dr. Thompson is a native of Missouri, received his preliminary education in Connecticut and his M.D. degree from Cornell University in 1955.

J. B. Titmarsh, Jr., M.D., Bethany, has become a member of the Grand River County Medical Society. Dr. Titmarsh is a native of Missouri, received his preliminary education in S. Dakota and his M.D. degree from Bowman Medical School in 1957.

John M. Wanamaker, M.D., Rock Port, has become a member of the Nodaway-Holt-Atchison-Gentry-Worth County Medical Society. Dr. Wanamaker is a native of Nebraska, received his preliminary education in Iowa and his M.D. degree from the University of Iowa in 1957.

DEATHS

Burhrer, Cletus E., M.D., Lawson, a graduate of the University of Kansas, 1930; a member of the Lafayette-Ray County Medical Society; aged 63; died December 3.

Johnson, Edgar W., M.D., Kansas City, a graduate of Kansas City Hahnemann Medical College, 1910; member of Jackson County Medical Society; aged 75; died December 28.

Russell, James M., M.D., Monett, a graduate of Starling Medical College, 1892; member of

(Continued on page 303)

After a history and a physical ruled out organic disease, the physician diagnosed the case as recurring states of anxiety. To relieve these symptoms for this busy, on-the-go housewife, he prescribes Meprospan-400, the *only* meprobamate in *sustained-release* form.

As directed, the patient takes one Meprospan-400 capsule at breakfast. Her symptoms of tension and nervousness are soon relieved, and she will not have to remember to take another capsule until dinnertime.

Calm and relaxed, the patient is no longer upset by the pressures and irritations met in everyday life, nor is she likely to be incapacitated by autonomic disturbances, drowsiness, ataxia or other untoward reactions.

Alert and attentive, the patient participates in a P.T.A. meeting, following her second capsule of Meprospan-400 taken with the evening meal. Meprospan-400 does not decrease her mental efficiency or interfere with her normal activities or behavior.

Peacefully asleep, the patient enjoys beneficial rest . . . Meprospan-400 has relieved the tensions that previously prevented sleep or kept her tossing and turning throughout the night.

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most convenient dosage form . . .

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Usual dosage: One capsule at breakfast lasts all day, one capsule with evening meal lasts all night. **Supplied:** Meprospan-400, each blue-topped *sustained-release* capsule contains 400 mg. Miltown. **Also available:** Meprospan-200, each yellow-topped *sustained-release* capsule contains 200 mg. Miltown. **For children:** Capsules can be opened and the coated granules mixed with soft foods or liquids.

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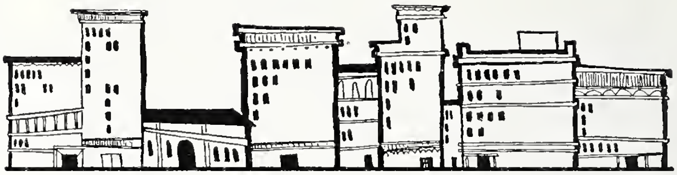

WASHINGTON UNIVERSITY

Microbiology Head Named

Dr. Herman N. Eisen has been named head of the department of microbiology at Washington University School of Medicine, Chancellor Ethan A. H. Shepley has announced. The appointment is effective immediately, although Dr. Eisen will not assume active duties as department head until July. He has been a member of the Medical School staff since accepting the position of professor of medicine and head of the division of dermatology in 1955. As head of the department of microbiology, Dr. Eisen will replace Dr. Arthur Kornberg, 1959 Nobel laureate, who resigned in June of 1959 to head the new department of biochemistry at Stanford School of Medicine.

Among important immunological questions which Dr. Eisen has been investigating are: synthesis and release of antibody from lymph node cells; the demonstration of antibody activity in certain particulate fractions of the lymph node cell; the synthesis of gamma globulin by disrupted lymph node cells; the preparation of purified antibodies and an investigation of their reactions with the chemical inducers of their production. Dr. Eisen and an associate, Dr. Karush, were the first to use the technic of equilibrium dialysis in studying these reactions; investigation of allergic skin responses; investigation of allergic reactions to penicillin. Dr. Eisen, who received the M.D. degree from New York University, was assistant in pathology at Columbia University from 1944-46; assistant in chemistry at New York University College of Medicine, 1947-49; assistant professor in industrial medicine at New York University from 1949-52 and associate professor from 1952-55. He is a member of several professional societies including the American Society for Clinical Investigation, Association of American Physicians, The Harvey Society, American Association of Immunologists, Society for Experimental Biology and Medicine, and the American Chemical Society, Alpha Omega Alpha, honorary medical society, Phi Beta Kappa and Sigma Xi. He has been an associate editor of the *Journal of Immunology* and a member of the Immunology Study Section of the National Institutes of Health. He is now an associate editor of the Proceedings of the Society for Experimental Biology and Medicine and a consultant to the Surgeon General of the Army, Armed Forces Epidemiological Board. Dr. Eisen's wife, Natalie Aronson Eisen, received the M.D. degree from New York University in 1947 and is a research fellow in medicine and pediatrics at Washington University School of Medicine. The Eisens have four children.

90th Birthday

Dr. Robert J. Terry, professor emeritus of anatomy at Washington University School of Medicine, observed his 90th birthday Jan. 24 in Weston, Mass., where he has been living with a daughter, Mrs. Celeste Forbes, for the last two years. Dr. Terry headed the department of anatomy at Washington University School of Medicine from 1900, until his retirement from teaching in 1941. He continued his research investigations in his medical school laboratory, until moving to Weston in 1958. He is presently assembling the results of his many experiments on fluid in the lung, and his extensive research paper on "Sprengel's Deformity and Club-Foot" was published in the *American Journal of Physical Anthropology* last fall. Dr. Terry was a member of the 1910 executive faculty instrumental in the complete reorganization of the medical school, and he is well-known among scientists in his field for the reforms he introduced in the teaching of human anatomy. He received the medical degree in 1895 from Missouri Medical College, forerunner of Washington University School of Medicine.

Panelists, Lecturers

Dr. Carl Moyer, professor and head of the department of surgery at Washington University School of Medicine, was among panelists at the 57th annual Congress on Medical Education and Licensure held in February in Chicago. Dr. Moyer participated in a discussion on the effect the growing emphasis on research in the medical school curriculum has had on the medical education of undergraduates. Also on the panel were Dr. Philip Handler of Duke University School of Medicine; Dr. William H. Resnik, Yale University School of Medicine, and Dr. William

Dock, New York Downstate Medical Center. The discussion, in the form of a debate, was presented during the Sunday general session of the Council on Medical Education and Hospitals of the American Medical Association. The four-day Congress also included meetings of the Advisory Board for Medical Specialities and of the Federation of State Medical Boards of the United States.

Dr. Daniel C. Tosteson, associate professor of physiology, discussed "Enzymatic Aspects of Active Sodium and Potassium Transport" at a Symposium on Membrane Transport presented in conjunction with the Fifth Annual Meeting of the Biophysical Society held in February in St. Louis. Dr. Floyd E. Bloom, assistant in medicine, Dr. Gordon M. Schoepfle, associate professor of physiology, and Dr. David B. McDougal, Jr., assistant professor of pharmacology, presented a research paper on "Studies on the Kinetics of Procaine Acetyl Choline Antagonism." The four day meeting was held in the Chase Hotel, with more than 600 biophysicists from the United States and several foreign countries in attendance. Washington University Medical Society presented a symposium on the metabolism and biochemical functions of iron at the January meeting. Symposium moderator was Dr. Carl V. Moore, Busch professor and head of the department of medicine. Dr. Elmer B. Brown, Jr., assistant professor of medicine, discussed the mechanism of iron absorption. The placental transfer of iron was described by Dr. Jack Davies, professor of anatomy; and Dr. George D. Sorenson, instructor in pathology, discussed sideroblastic anemia as an example of impaired iron utilization. Dr. Philipp Strittmatter, assistant professor of biological chemistry, reported on the role of iron in biological catalysis.

Lecturer

Dr. MacDonald Critchley, physician to the National Hospital, Queen Square, London, was a guest of the Beaumont-May Division of Neurology at Washington University School of Medicine and the Central Institute for the Deaf in December. While at the Medical School he lectured on "The Nature of Animal Communication and Its Relation to Language in Man" and "Broca's Contribution to Aphasia Reviewed a Century Later." He also attended the regular Neuro-pathology, Neurology-Neurosurgery Conferences and participated in Neurological Rounds.

Obituary

Dr. Philip A. Shaffer, noted biochemist and former dean of the Washington University School of Medicine, died December 4 in Barnes Hospital at the age of 79. He had been ill since last August. He was dean of the medical school from 1915 to 1919 and again from 1937 to 1946. He was credited by his colleagues as having been chiefly responsible for elevating the school to a position of preeminence among medical institutions. Through his research work, Dr. Shaffer demonstrated the importance of a high calorie diet in the treatment of typhoid fever, developed a test for determining the amount of sugar in the bloodstream and devised a method for obtaining insulin from the pancreas. In 1951 he retired from the faculty and was given the title of distinguished service professor emeritus and lecturer in biological chemistry. He continued his research for several years afterward. Dr. Shaffer was born in Martinsburg, W. Va., and took his undergraduate studies at the University of West Virginia. In 1904 he was given the first doctor of philosophy degree in biological chemistry ever awarded by Harvard University. He did research at the Cornell Medical College before coming here in 1910. He served in the Army in World War I.

Foreign Visitors

Ten second-year medical students and one of their professors from San Carlos University, Guatemala, visited the Washington University-Barnes Hospital Medical Center Jan. 11 through 16, under the auspices of the U. S. Department of State and the National Social Welfare Assembly, Inc. During the six-day visit, the students were given a concentrated view of the teaching, research and patient care programs of Washington University Medical School, Barnes and Affiliated hospitals and the Central Institute for the Deaf. They attended classes, conferences and lectures; observed surgery utilizing the heart-lung pump, and viewed demonstrations of new and unusual equipment in the various departments of the Medical Center. At a tour concluding luncheon Monday, Jan. 16, in the dining room of David P. Wohl, Jr., Memorial Hospital, the students discussed medical school policies with administrative officers. The St. Louis tour was one segment of a 35-day itinerary which took the students, their professor and the two accompanying State Department interpreters to Medical Centers in New Orleans, La.; Minneapolis and Rochester, Minn.; Chicago, Ill., and Columbus, Ohio. The project was financed by the Educational Travel Program, Office of Cultural Exchange, U. S. Department of State, although each student was responsible for travel expenses from his home to the United States and return.

Alumni Party

Washington University Medical Alumni will hold an alumni party during the Missouri State Medical Association meeting in Kansas City this month. The party will be held on Monday evening, March 20, in the Music Room on the mezzanine floor of Hotel Muehlebach, from 5:30 to 7:30 p.m. Alumni can register for this party at the Registration Desk in the Grand Ball Room.

UNIVERSITY OF MISSOURI

Radiological Society Organized

Organization of the Missouri Radiological Society, Inc., as a "unified voice for the radiologist of Missouri" has been announced by the Board of Directors of the Missouri Radiological Society with Gwilym S. Lodwick, M.D., of the University of Missouri School of Medicine, acting as spokesman. Dr. Lodwick, professor and chairman of the department of radiology and Associate Dean at the School of Medicine, has been elected first president of the new society.

Final organization was effected at a recent gathering of Missouri radiologists in Columbia for the first annual meeting, at which the board of directors was elected, officers were chosen, a constitution and tentative by-laws were drawn up, and steps were taken to apply for articles of incorporation in Missouri. A meeting was held in St. Louis to complete the permanent by-laws.

The officers of the Missouri Radiological Society in addition to Dr. Lodwick are: president-elect, Wendell G. Scott, M.D., St. Louis, clinical professor of radiology at Washington University; and secretary-treasurer, Milton Shoss, M.D., Cape Girardeau.

Members of the board of directors, who were unanimously elected at the annual meeting, are: Dr. Lodwick, Dr. Scott, and Dr. Shoss; Arthur B. Smith, M.D., Kansas City; Sidney Rubin, M.D., Kansas City; Mark D. Eagleton, Jr., M.D., Clayton, and Sam J. Merenda, M.D., St. Louis.

While St. Louis and Kansas City have local radiological societies and some of the Missouri Radiological Society members are affiliated with one or the other of those groups, the need of a state-wide organization has been increasingly evident for some time, especially in view of the great interest in radiation fallout and hazards, and related matters, Dr. Lodwick said.

"This need has arisen from the necessity for unified action of Missouri's radiologists that extends beyond purely regional interests," Dr. Lodwick said. "Some of the radiological problems relate to the establishment of standards of ethical practice; recommendations to the state on matters of radiological protection; problems of medical insurance and hospital practice, and representation to the nation's societies."

The new radiological society has been informally recognized by the Missouri State Medical Association and by the American College of Radiology. It has been asked to elect a councilor to the American College of Radiology. The articles of incorporation have been submitted to the Missouri Secretary of State.

Among the purposes of the society listed in the articles of incorporation are the advocacy of measures that will tend to alleviate suffering and improve the health and protect the lives of human beings; elevation of the standards of radiological education and practice; promotion of exchange of ideas among the members; promotion of the interests of radiology by cooperation with the Missouri State Medical Association and other local and national groups of similar or related purposes; the establishment, maintenance, and enforcement of high standards of professional conduct and ethics as a condition of membership; and promotion of the presentation of scientific papers and discussions before the membership and other groups.

Dr. Lodwick, one of a number of radiologists in the state active in the establishment of the new society, said interest in such an organization has been shown for some time. The new organization received its definite start at a meeting of an organizational committee, for which Dr. Lodwick served as temporary chairman, in Jefferson City last October. That meeting worked out the agenda for the first annual meeting and set up organizational procedure.

Meetings at Medical Center

Seven third- and fourth-year students in the University of Missouri School of Medicine were initiated into the Gamma Missouri Chapter of Alpha Omega Alpha, national honor medical society, January 21, 1961.

Lee Pfefer, fourth-year student and president of Gamma Missouri Chapter of the Society, conducted the initiation ceremonies.

Dr. Milton D. Overholser, professor and chairman of the department of anatomy, is counselor for the chapter of the society at the University, and Dr. Gwilym S. Lodwick, associate dean of the School of Medicine and chairman of the department of radiology, is secretary.

Those initiated and their home towns are: Lenard L. Politte, Bismarck; Charles W. Cheek, Fair Play; George M. Pavey, Kirkwood; Rob-

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Gifts and Grants

Dr. B. A. Westfall, professor and chairman of the department of Physiology-Pharmacology, and Dr. R. L. Russell, associate professor of pharmacology, have been awarded an N.I.H. grant in the amount of $15,060 in support of "Pharmacology of Some Plants Indigenous to Missouri."

Dr. Jona C. Thaemert, assistant professor of anatomy, has been awarded a research grant of $15,109 by the National Institutes of Health in support of his electron microscope study of smooth muscle tissue. The grant period extends from Jan. 1, 1961, to Dec. 31, 1961. Two additional years of support, amounting to $30,321, have been recommended by N.I.H. for this project, provided the Congress appropriates the necessary funds. The RCA EMU-3 electron microscope has now been installed in the department of anatomy in a special room.

Dr. Ian M. Thompson, chief of the division of urology of the Medical Center received a U. S. Public Health Service Grant in the amount of $5,600 for research into the mechanisms of kidney function.

Dr. Benedict J. Campbell, assistant professor of biochemistry, received a U. S. Public Health Grant A-4660 for $16,798 to study "Metal Mediation of Pituitary Hormonal Regulation."

Dr. John M. Franz, assistant professor of biochemistry, received an extension of his U. S. Public Health Grant A-1469 (C3) to continue his study on "Hormonal Control of Tryptophan Pyrrolase" in the amount of $11,844.

New Appointments

President Elmer Ellis of the University of Missouri has announced the appointment of John J. Modlin, M.D., a Columbia surgeon and clinical professor of surgery at the University School of Medicine, as professor of surgery and chairman of the department of surgery at the School. The appointment was approved by the Board of Curators at the meeting Jan. 13, 1961.

Dr. Modlin has been in private practice of surgery in Columbia and on the clinical faculty of the School of Medicine since 1952. First as clinical associate professor and then as clinical professor of surgery at the School, he has been active in the teaching of medical students in surgery, has lectured before students in the School of Medicine and the School of Nursing, and has participated in faculty surgical conferences. He has been in charge of the University's cancer registry for Missourians since the registry was established at the Medical Center in July 1959, and he is at present chairman of the School of Medicine Committee on Post-Graduate Medical Education.

In addition to his work with the School of Medicine, Dr. Modlin is chairman of the Missouri State Cancer Commission, to which he was appointed June 2, 1958, by former Gov. James T. Blair, Jr. He is on the consulting staff of Ellis Fischel State Cancer Hospital at Columbia. Prior to entering private practice in Columbia, Dr. Modlin was chief surgeon at Ellis Fischel Cancer Hospital from 1947 to 1952.

John J. Modlin, M.D.

Dr. Modlin received his advanced surgical training at Barnes Hospital in St. Louis, where in 1946-47 he was chief resident in surgery and worked under the late Dr. Evarts A. Graham, internationally-noted surgeon and surgeon-in-chief at Barnes Hospital and St. Louis Children's Hospital.

Dr. Modlin is a diplomate of the American

Board of Surgery and a Fellow of the American College of Surgeons. Other professional memberships include the Society of University Surgeons, the American Medical Association and the Central Surgical Association. He is author of a number of technical publications in surgery.

The newly-appointed chairman of the medical school's department of surgery received his M.D. degree from the University of Nebraska (1938), where he also earned his B.Sc. degree. He served his internship in surgery at Montreal General Hospital (McGill University), Montreal, Canada, and then served as an assistant resident in surgery in that hospital in 1939-40.

Dr. Modlin was assistant resident in surgery at Barnes Hospital (Washington University) in St. Louis from 1940 until he entered military service in 1942 with the Washington University Hospital Unit, 21st General Hospital. On completing his service in 1945 he returned to Barnes Hospital, where he was Rockefeller Fellow in Surgery until he became the chief resident in surgery in 1946.

Dr. Modlin is replacing Dr. John A. Buesseler, associate professor of surgery (ophthalmology) who has been serving as acting chairman of the department of surgery.

The appointment of Dr. Aimee Moore, now on the faculty of Cornell University in Ithaca, N. Y., to be Director of Dietetics and Nutrition at the University of Missouri Medical Center and professor of food and nutrition in the School of Home Economics was announced Jan. 19, 1961, by President Elmer Ellis. She will assume her duties here Aug. 1, 1961. As Director of Dietetics and Nutrition at the Medical Center, Dr. Moore will also teach some courses in foods and nutrition in the School of Medicine and School of Nursing curriculum.

Dr. Moore has been on the staff of Cornell University since 1947, and is now associate professor of institution management in the New York State College of Home Economics, one of the divisions of Cornell. She received her B.S. in Home Economics degree at the University of North Carolina, and served her internship in hospital dietetics at the University of Michigan Hospital. She received her master's degree from Columbia University, and her Ph.D. degree from Michigan State University, the latter in 1959. She has served as hospital dietitian at Mississippi State Sanatorium, the Stuart Circle Hospital in Richmond, Va., and in the U. S. Army Medical Corps, serving with the latter in North Africa, Italy and France.

Edward B. Shires, M.D., Leawood, Kan., has been appointed clinical associate professor of medicine (physical medicine) in the department of medicine. Dr. Shires, who is now living in Kansas City, is a native of Schenectady, N. Y., and received his A.B. degree from Albany Medical College, a division of Union University located in Albany, N. Y. in 1940. He served from 1941 to 1954 in the U. S. Army Medical Corps.

Robert Earl Froelich, M.D., Normandy, Mo., has been appointed assistant professor in the department of psychiatry, effective September 1, 1961. Dr. Froelich received his A.B. degree in 1951, and his M.D. degree in 1955 from Washington University in St. Louis. He served his internship at St. Louis County Hospital, spent two years, September 1956 to September 1958, as a medical officer in the U. S. Air Force, and since 1958 has been psychiatrist in residence at the Medical College of Georgia in Augusta. He is a member of various medical societies and associations and a member of the American Psychiatric Association.

Don R. Sipes, M.D., has been appointed assistant instructor in obstetrics and gynecology and first-year resident in obstetrics and gynecology, beginning July 1, 1961. Carl C. Pearman, M.D., has been appointed assistant instructor in obstetrics and gynecology and first-year resident in obstetrics and gynecology, beginning July 1, 1961.

Trips and Talks

Dr. James T. Barrett, associate professor of microbiology, is one of ten microbiologists in the Nation selected to attend a three-week course sponsored by the Communicable Disease Center, Atlanta, Georgia. He left Jan. 22 for the Center, which is a division of the U. S. Department of Health, Education and Welfare.

The course Dr. Barrett is attending is devoted to serologic procedures useful in identification of bacterial pathogens. Instruction in the use of several of the most recent laboratory procedures is included. The course is considered to be of an advanced nature and only ten microbiologists from the United States are accepted each year.

Dr. Phillip Khuri, assistant instructor in medicine at the University of Missouri School of Medicine, appeared on "Of Interest to Women" on KOMU-TV January 18, 1961. He discussed some phases of life in his homeland, Lebanon.

Dr. James M. A. Weiss, associate professor and acting chairman of the department of psychiatry, served as a delegate from Missouri and also as recorder for the Workgroup on Mental Health Research at the 1961 White House Conference on

Aging in Washington, D. C., January 9 through 12, 1961. The purpose of the conference was to define the problems related to aging and older citizens in this nation, and to make recommendations for their solution in terms of over-all programs for the new President of the United States and Congress to consider and implement. Dr. Addison M. Duval and Dr. Robert H. Barnes, clinical associate professors of the Medical Center, also attended the conference as delegates from Missouri.

Dr. Weiss also was the main speaker at a meeting of the Unitarian Fellowship of Columbia at the Missouri School of Religion, Jan. 15, 1961, speaking on "Marriage, the Family and Mental Health." This was one of a series of lectures honoring the late Dr. Jacob S. Roden, formerly professor and chairman of the department of obstetrics and gynecology at the Medical Center.

Dr. Carl H. Almond, assistant professor of surgery, and Dr. Ian Thompson, associate professor of surgery (urology) attended the Singleton Surgical Society Meeting in Monterrey, Mexico, Jan. 13 through 15, 1961, where they exhibited renal stop flow studies. Dr. Thompson will also present a paper on "Genitourinary Cancer" at the annual meeting of the Western Urological Forum in February.

Dr. Hugh E. Stephenson, Jr., attended the Twenty-third Annual Awards Ceremony and Banquet of the U. S. Junior Chamber of Commerce in Kansas City, Mo., Jan. 14, 1961, honoring America's Ten Outstanding Young Men of 1960. Dr. Stephenson was one of the recipients for 1956.

Dr. T. D. Luckey, professor and chairman of the department of biochemistry, spoke at a "Modern Views of Nutrition" seminar in Ames, Iowa, at Iowa University, Jan. 7, 1961, giving a talk on "The Biochemistry and Nutrition of Germfree Animals." Dr. Luckey also gave a talk entitled, "The History of the Balance" at a meeting of the Medical History Group of the University of Missouri, Jan. 12, 1961, in the Medical Center here.

Dr. Donald A. B. Lindberg, assistant instructor in pathology, attended the Medical Education for National Defense symposium on "Lectures in Aerospace Medicine," at Brooks Air Force Base in San Antonio, Texas, Jan. 16. through 20, 1961. He also presented a paper at the Eastern Missouri Branch of the Society of American Bacteriologists, at the Jewish Hospital in St. Louis, Dec. 15, 1960.

ST. LOUIS UNIVERSITY

Study Abroad

The St. Louis University School of Medicine scientists have been awarded National Science Foundation fellowships for study abroad. Dr. Karl G. Lark, assistant professor of microbiology, was awarded a fellowship to cover a seven month period of research at the University of Edinburgh in Scotland. Dr. Harold L. Segal, associate professor of pharmacology, was awarded a fellowship for a six month period of research at the University of Vienna. Both Drs. Lark and Segal will be on leave of absence from the St. Louis University until September.

Dr. Lark joined the department of zoology at the University of Edinburgh in order to expand his technical and theoretical knowledge of cell division. He is an investigator in the field of normal and abnormal cell growth. The over-all purpose of his research has been to establish a basic understanding of the cell division process and of those factors which may destroy the normal pattern of cell growth. It is hoped that information obtained from such studies may lead to an understanding of some of the problems involved in cancer.

While at the University of Edinburgh, he is conducting research with Dr. Murdock Mitchison and other members of the zoology department who are engaged in the study of cell division in various forms of life from protozoans to human cells.

Mrs. Cynthia Lark, who also is engaged in research at St. Louis University, accompanied her husband to Scotland. Her laboratory work there is being supported by a grant from the United States Public Health Service.

Dr. Segal is conducting investigations on the chemical structure of proteins at the University of Vienna. At St. Louis University he has been carrying out research into the way in which hormones and other environmental factors control enzyme activity in the body under a five year grant from the United States Public Health Service in the amount of $135,000.

While he is in Europe, Dr. Segal will report on the results of some of these studies at the Fifth International Congress of Biochemistry in August under a travel grant from the American Society of Biological Chemists.

Grants

Dr. Henry Pinkerton, director of the department of pathology, has been awarded a new

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1. Weissberg, G.: Clin. Med., June 1960.

2. Spoor, H. J.: N. Y. St. J. Med., Oct. 15, 1958.

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grant of $32,034 for a two year period from the United States Public Health Service for studies of the salivary gland viruses in tissue culture. The human type of virus which is a cause of death in infants is acquired before the child is born and yet the mother shows no indication of illness.

Using a method which has been worked out for the production of areas of degeneration in single layers of cells in tissue culture, the method of growth of the viruses will be studied. Attempts will be made to find chemical agents which interfere with the multiplication of these viruses within the cells.

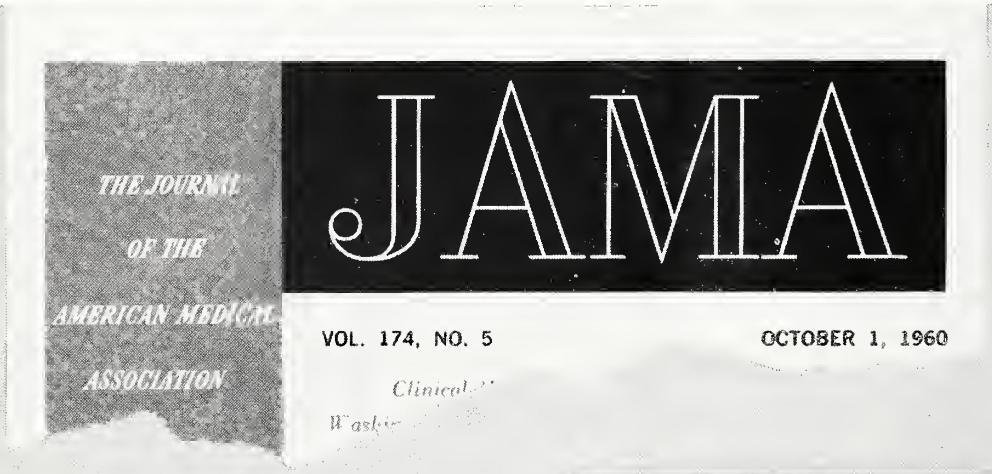
Another grant of $8,970 supports the research investigations of Dr. Richard C. Hard, Jr., assistant in pathology. Drs. Pinkerton and Hard are studying the experimental production of hypogammaglobulinemia. They are attempting to reduce the gammaglobulin level in the blood, since antibodies arc present in gammaglobulin and interfere with transplantation of tissues and organs. Methods that reduce the gammaglobulin will tend to make the organ and tissue transplants more successful.

A second new grant of $15,421 for a two-year period was awarded to Dr. George E. Gantner, assistant professor of pathology. Dr. Gantner's research involves a chemical determination of specimens and tissues to predict how long a subject has been dead. This work being done in cooperation with the St. Louis County Coroner's Office will aid the accuracy and speed of a medical investigation of traumatic deaths. Working with Dr. Gantner on this investigation is Dr. P. Raphael Caffrey and Dr. William Sturner, both of whom are residents in pathology.

A giant renewal of $11,443 from the United States Public Health Service went to Dr. Kermit Christensen, professor of anatomy and acting director of the department. Dr. Christensen and his associates are investigating the innervation of blood vessels. They hope to point the way to a solution of the perplexing problems concerning the functional nerve endings in effector tissues, especially in relation to the smooth muscle in the walls of blood vessels.

Alpha Omega Alpha

Eleven students and two alumni of the St. Louis University School of Medicine have been elected to membership in the University's Chapter of Alpha Omega Alpha, national honorary medical society.



THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION
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Elected to membership included seven senior and four junior medical students, who will be initiated at a banquet to be held at Slay's Steak House, March 21.

Seniors elected to membership were: Phillip W. Carr, Eldon, Mo.; Dennis A. Diedrich, Greenleaf, Kansas; James F. King, Louisville, Ohio; Jon F. Sassin, St. Louis; John C. Soucy, Jr., Belleville, Ill.; P. G. Steinbicker, Jr., St. Louis 17, and Richard T. Torchia, St. Louis 10.

Juniors elected were: Duke H. Baker, Dayton, Ohio; Sister Mary Philippine Duchesne, St. Louis; James Beckner, South San Gabriel, Calif., and John P. Crotty, Belleville, Ill.

The two alumni chosen for initiation were: Dr. James L. Donahoe, senior instructor in pediatrics, and Dr. J. F. Gerard Mudd, assistant professor of internal medicine and director of the Cardiac Catheterization Laboratory.

Each year a select number of the senior and junior class is approved for candidacy by the officers of the school and elections are made by the active members of the chapter. Membership is based on scholarship, character and personality.

The objectives of Alpha Omega Alpha are the promotion of scholarship and research in medical schools, the encouragement of a high standard of character and conduct among medical students and graduates and the recognition of high attainment in medical science.

Honor

Dr. Edmund Smolik, associate professor of clinical surgery and director of neurosurgery at the School of Medicine, has been named as the first recipient of the new John Carroll University Alumni Honor Medal. He accepted the award at the John Carroll alumni association's annual communion breakfast on January 22.

DEATHS

(Continued from page 292)

Ozarks Medical Society; aged 94; died January 10.

Gallagher, John F., M.D., St. Louis, a graduate of Washington University, 1906; member of St. Louis Medical Society; aged 68; died January 14.

Dooley, Thomas A., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1953; member of St. Louis Medical Society; aged 34; died January 18.

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Barclay, P. L.: J.A.M.A.
174:474, Oct. 1, 1960.

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PDW-12

CHEST DISEASES

A symposium on "Chest Diseases" will be presented at the Missouri State Sanatorium, Mount Vernon, on April 8 and 9. The symposium is sponsored by the Southwest Chapter of the Missouri Academy of General Practice, and cosponsored by the Missouri Chapter of the American Trudeau Society, the Missouri Chapter of the American College of Chest Physicians and the Missouri State Sanatorium. A registration fee of $2.50 will be charged which will include Sunday dinner. All physicians are urged to attend and to make prior reservations.

PROGRAM

FIRST SESSION—April 8, 1961

Chairman, Charles Isbell, M.D.
Greetings, C. A. Brasher, M.D.

8:00 p.m. Clinical, Pathologic X-ray Conference—presenting four thoracic surgical cases.
Moderator, David Gorelick, M.D.
Case Presentations, Alan Bailey, M.D.
Discussion of X-rays and Surgery, John W. Polk, M.D., and W. W. Buckingham, M.D.
Presentation and Discussion of Pathology, Henry C. Sweany, M.D.
Discussion and Questions.

9:00 p.m. Coffee Break.

9:10 p.m. Medical X-ray Conference—Presentation of Interesting X-rays and Medical Diagnostic Problems, and Problem X-rays Mailed or Brought in by Physicians Attending Symposium. (If mailed, please time to arrive by April 1, 1961, and label "For Symposium.") J. L. Yates, M.D., and H. V. Langeluttig, M.D., Discussants.

SECOND SESSION—April 9, 1961

Chairman, Jack Wiles, M.D.

8:30 a.m. The Present Status the School Certification Program and a Report of the Newton County Survey, C. A. Brasher, M.D.

8:50 a.m. Problems of the Public Health Nurse in the Management and Care of Patients With Tuberculosis, C. W. Meinershagen, M.D.

9:10 a.m. The Relationship of the State Board of Health to Supervision of Nursing

(Continued on page 306)

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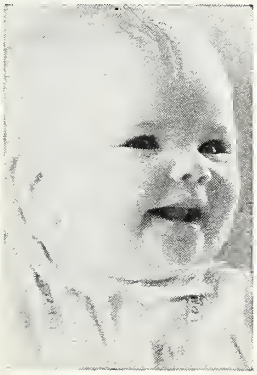

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*MC GOVERN, J. P., MC ELHENNEY, T. R., HALL, T. R., AND BURDON, K.D.: ANNALS OF ALLERGY 17:915, 1959.

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† PARABROMDYLAMINE MALEATE

Homes and the Promotion of Doctor-Patient Relationships Therein, William Allen, M.D.

9:30 a.m. The Non-institutional Management of Tuberculosis, H. V. Langeluttig, M.D.

9:50 a.m. The Office Management of Common Obstetrical Problems, John Ferguson, M.D.

10:10 a.m. Discussion and Questions From the Floor.

10:20 a.m. Coffee Break.

THIRD SESSION

Chairman, W. T. McNew, M.D.

10:30 a.m. The Practical Management of Bronchial Asthma, Vernon Cushing, M.D.

11:00 a.m. The Relationship of the (University of Missouri) Medical School to Post Graduate Education, Vernon Wilson, M.D.

11:20 a.m. The Value of Lung Biopsy, John W. Polk, M.D.

11:40 a.m. The Diagnosis and Management of Histoplasmosis, J. L. Yates, M.D.

12:00 noon Discussion and Questions From the Floor.

12:10 p.m. Lunch.

FOURTH SESSION

Chairman, George C. Olive, M.D.

1:00 p.m. The Diagnosis and Treatment of Anorectal Diseases, Ronald Elkins, M.D.

1:20 p.m. Cardiac Diseases Seen in the Office in General Practice, Glenn Turner, M.D.

1:40 p.m. The Diagnostic Approach to Intrathoracic Neoplasms, Richard Overholt, M.D.

2:10 p.m. Office Management of Lesions of the Breast, Charles Lockhart, M.D.

2:40 p.m. Discussion and Questions.

2:50 p.m. Coffee Break.

FIFTH SESSION

Chairman, T. M. Macdonnell, M.D.

3:00 p.m. The Problem of Resistance to Antituberculosis Chemotherapy, Henry C. Sweany, M.D.

3:20 p.m. The Diagnostic Approach to Intrathoracic Neoplasms, Richard Overholt, M.D.

3:50 p.m. The Management of the Difficult Bronchopulmonary Infections, Jerry Flance, M.D.

4:10 p.m. The Management of the Patient With Hemoptysis, J. L. Yates, M.D.

4:40 p.m. Discussion and Questions.

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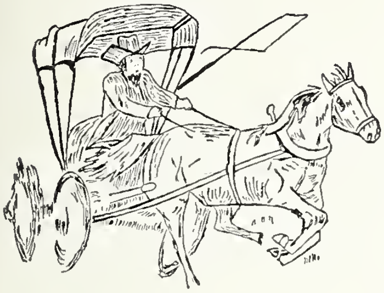
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



Forty Years Ago

Mme. Marie Curie has been invited to visit the United States and expects to come in May. Committees of reception have been appointed, including in their membership leading men of science. It is planned to present to Mme. Curie a gram of radium.

Dr. B. A. Wilkes of St. Louis has been elected superintendent of the Missouri Baptist Sanatorium in St. Louis to succeed the late Mr. J. S. Whaton. Dr. Wilkes was formerly superintendent of the same institution, resigning in 1900 to enter private practice.

Dr. Emmett P. North, a member of the Missouri State Board of Health, was elected president of that body at the annual meeting of the board in January. Dr. North has the distinction of holding the presidency of the St. Louis Society and the Missouri State Board of Health concurrently.

The testimonial dinner, in honor of Dr. W. A. McAlester of Columbia, in celebration of his eightieth birthday, given at the Daniel Boone Tavern at Columbia of February 15, was attended by more than three hundred friends and relatives of Dr. McAlester. Dr. A. R. McComas of Sturgeon presided.

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Dornwal is one tranquilizer that doesn't make people sleepy. It's a tranquilizer pure and simple. Its effectiveness you will see clearly the next time you encounter a patient given to tension headaches. Try Dornwal and see the results.

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P.S. For the "Genericist", Dornwal is amphenidone

No absolute contraindications to the use of Dornwal are known. There have been no reports or evidence of habituation, addiction or drug tolerance in animal or clinical studies. Dornwal is relatively free from untoward effects when administered at recommended dosages.

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PDW-11

Dr. Philip Skrainka of St. Louis has accepted a position with the American Institute of Medicine of New York, as supervising editor, and left St. Louis for his new home February 1. Dr. Skrainka's well-known literary attainments, and experience in medical journal work, make him an eminently fit person to fulfill the duties of the work he has undertaken.

Dr. Albert Ross Hill, president of the University of Missouri since 1908, has accepted the vice chairmanship of the central committee of the American National Red Cross, to which he was elected at a special meeting of the committee. He will enter upon his Red Cross duties about March 1 and will be Director of Foreign Operations of the organization. Dr. Hill succeeds Frederick P. Keppel.

Twenty-Five Years Ago

Dr. John McH. Dean, St. Louis, was elected president of the St. Louis Surgical Society at the annual banquet held on January 15.

The staff of Wesley Hospital, Kansas City, elected the following officers for 1936: President, Dr. Ralph R. Coffey; vice president, Dr. O. H. McCandless; secretary, Dr. A. Graham Asher.

Dr. Fred A. Jostes, St. Louis, was elected president of the St. Louis Clinics for 1936. Other officers are: Vice president, Dr. Joseph C. Peden; secretary, Dr. Daniel L. Sexton; treasurer, Dr. Clinton W. Lane.

The twentieth annual session of the American College of Physicians will be held in Detroit with headquarters at the Book-Cadillac Hotel, March 2 to 6. Dr. James A. Miller, New York, is president of the College. Dr. Walter B. Cannon, professor of physiology at Harvard University Medical School, will deliver the annual convocation oration on "The Role of Emotion in Disease."

The Mu Chapter of the Phi Beta Pi medical fraternity of Washington University School of Medicine has announced the establishing of a lectureship to be known as the Leo Loeb Lectureship. Dr. Leob is best known for his work in cancer research and research in the interrelation of the endocrine glands. This is his twenty-first year with the Washington University School of Medicine.

Ten Years Ago

A large number of the 1,992,950 men rejected for military service because of mental and educational deficiency and neuropsychiatric conditions in World War II could have served profitably in some capacity according to an article in the February 17, *Journal of the American Medical Association*. This represents 31 per cent of

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the total rejections. The over-all number of rejections for military service, they said, from November 1940 to August 1945 was 6,419,700 out of the 17,954,500 examined, or 35.8 per cent.

Herbert L. Mantz, M.D., Kansas City, has been appointed chief consultant in tuberculosis for the United States Veterans Administration.

Richard L. Sutton, Sr., M.D., McAllen, Texas, honor member of the Jackson County Medical Society, has been elected a corresponding member of the Swedish Dermatological Society.

The Hodgen Club, organized to further the interests in the St. Louis City Hospital and the teaching and practice of surgery as promulgated by one of the hospital's most illustrious alumni and one of its first two interns, the late John Thompson Hodgen, M.D., was formed during the January Session of the sectional meeting of the American College of Surgeons. Membership will be limited to certified surgeons who are members of the St. Louis City Hospital Alumni and will be restricted to twenty-five. Officers of the newly formed Hodgen Club are: President, Avery P. Rowlette, M.D., Moberly; vice president, Cyril Costello, M.D., St. Louis; secretary-treasurer, Leo V. Mulligan, M.D., St. Louis.

Surgical Society to Meet

The Missouri State Surgical Society will hold its fourth annual dinner meeting on Monday, March 20, at 6:00 p.m. in the Florentine Room of the Kansas City Club.

The guest speaker of the Society will be George Crile, Jr., M.D., Cleveland. His subject will be "Some Problems Connected With the Treatment of Cancer With Emphasis on Cancer of the Breast."

Nonmembers of the Missouri State Surgical Society are welcomed to the dinner and lecture but reservations must be made with the secretary, Dr. John A. Growdon, 1324 Professional Bldg., Kansas City 6, prior to Monday noon, March 20.

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THE ST. LOUIS SURGICAL SOCIETY

extends a cordial invitation to all members of the profession
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Thirty-Seventh Hodgen Lecture

OLIVER COPE, M.D.

Associate Professor of Surgery, Harvard Medical School
Visiting Surgeon, Massachusetts General Hospital

"HYPERPARATHYROIDISM: THE EXPERIENCE IN THE DIAGNOSIS AND TREATMENT OF 245 CASES"

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St. Louis Medical Society Auditorium
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WOMAN'S AUXILIARY

(*Continued from page 214*)

outside our membership. The melody would try to express my thanks to the officers and members of MSMA, to our Medical Advisory Councilors, to the National Auxiliary Board, and to the staffs at National Headquarters and at MSMA who have never failed us.

I'll be seeing you March 19 to 21 in Kansas City at the Hotel President for our Annual State Convention.

TUBERCULOSIS ABSTRACT

(*Continued from page 230*)

likely that cold symptoms would be reported by the individual.

In regard to the effect of chilling on the common cold, the data showed two important features: (1) among uninfected subjects, chilling did not activate latent viruses with the production of a clinical cold; (2) among subjects who received a uniform challenge, chilling did not increase the susceptibility to clinical infection.

Previous tonsillectomy had no influence on susceptibility or symptoms, nor did the smoking history of the person.

Discussion

The causative agents of the common cold appear to be several, perhaps many, different viruses. These viruses produce both clinical and subclinical infections in man. Each of the viruses can produce a variety of clinical syndromes, commonly classified under categories of common cold, undifferentiated upper respiratory infection, and "flu." The common cold viruses cause afebrile, acute coryza in the great majority of persons. With a few exceptions, these viruses have not been isolated, named, or well characterized.

The common cold viruses are present in infectious form in both the cells and the fluid of nasal secretions; the titer is sufficient to suggest that droplet spray could be an effective means of communicating infection. Person-to-person transfer, presumably by droplet spray, was observed to cause clinical illness in approximately 10 per cent of persons exposed under experimental conditions and in 17 to 55 per cent among family members. The viruses in the community at different times, however, appear to be immunologically different, and some seem to cause sharp waves of epidemic illness, whereas others are more endemic.

The strong positive correlation between the usual number of colds per year by history and symptomatic reactions to an innocuous instillation appears to establish a wide range of difference in the proneness of persons to develop rhinorrhea or coryza. The data do not permit a conclusion as to whether physiologic or psychologic facts are dominant. On either basis, it is surprising that among the subjects who were hyperreactors to an uninfected solution, there was not greater susceptibility to clinical illness from a secretion containing an infectious agent.

For centuries men have associated the common cold with environmental chilling. The present data seem adequate to conclude that the basis of the association is not the direct activation of latent viruses by physical cold or physiologic reaction to chilling, since these factors did not produce colds without infection.

Immunity

Previous epidemiologic and experimental observations that show insignificant immunity to the common cold have failed to recognize the number of specific viruses involved. Neutralizing antibody has been demonstrated in the serum and nasal secretion, and immunity to a specific rechallenge is as complete as that observed for influenza under natural conditions of infection. The duration of immunity is not known, but it appears to remain through at least one respiratory disease season.

These observations require the postulate that each viral upper respiratory illness is a specific infection, and thus that the number of viruses responsible for these infections is very great. Under the concept that the common cold is caused by many specific agents, each of which elicits an adequate immune response, the likelihood of discovering a predominant common cold virus that maintains this role for a long time is quite unlikely. If this is the case, the logistics for immunologic control of the common cold may be very difficult.

Curiosa et Trivia

WILLIAM B. McCUNNIFF

The average person blinks his eyes about 25 times per minute, each blink averaging about .2 second. At this rate, during a 10 hour drive at 40 miles per hour, he has traveled about 33 miles with his eyes shut.

It's cold comfort no matter which way you look at it. A recent study indicates that the healthiest people have little ambition and no deep sense of responsibility. Those who want to get ahead, create something, or are idealists, have more chronic diseases, more acute illnesses, and are generally considered less healthy.

Along with her other difficulties, Anne Boleyn, the unfortunate wife of Henry VIII, was reputed to have had six fingers, six toes (on each extremity), and three breasts. The arrangement of the latter is not a matter of record.

Capsule Clinics

- Platelets cannot be successfully stored in viable form even for relatively short periods of time. Platelet transfusion should be accomplished within less than three hours after collection. Baldini, M. et al., Blood **16**:1669, 1960.
- Cerebral changes responsible for mental retardation in patients with minor epilepsy are generally not reversible. Pauli, L. et al., J.A.M.A. **174**:1408, 1960.
- Newborn infants kept in the prone position cry less and have less diaper rash and self-inflicted excoriations than infants kept in the supine position. Keitel, H. G. et al., J. Pediat. **57**:884, 1960.
- Systemic administration of gamma globulin, alone and with erythromycin, did not influence the course of local staphylococcal lesions in experimental animals. Lambert, H. P., J. Lab. & Clin. Med. **56**:701, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

THE KENNEDY BILL

President Kennedy asked Congress to increase social security taxes to finance limited medical care for elderly persons on the social security rolls, a plan opposed by the medical profession.

The proposal was part of a sweeping health program outlined by Kennedy in a special message to Congress during his first month in the White House.

The Kennedy program also included federal aid for construction and operation of medical schools, scholarships for medical and dental students, grants for community nursing and hospital services, stepped-up medical research and expanded federal activity in the field of child and youth health.

Under Kennedy's proposal, social security beneficiaries 65 years and older could get up to 90 days of hospitalization for each single illness. However, the patient would have to pay $10 daily for the first nine days of hospitalization with a minimum payment of $20.

After release from a hospital, the elderly person could get up to 180 days in a nursing home. The social security program also would provide for payment by the government of all out-patient diagnostic costs in excess of $20 and community visiting nurse services.

INCREASE IN SOCIAL SECURITY TAXES

The program would be financed by increased social security taxes by one fourth of 1 per cent on both employers and workers and by three eighths of 1 per cent on self-employed persons covered by social security. The social security tax base also would be increased from the present $4,800 a year to $5,000.

Enactment of this proposal, coupled with another Kennedy recommendation and increases in the social security tax already scheduled in the law, would mean that workers and employers would be paying $250 each in social security taxes in 1969.

Nationwide television audiences were told by an American Medical Association spokesman why the medical profession supports the Kerr-Mills program of medical care for the aged and opposes tieing in with social security.

In television debates with Sen. Hubert Humphrey (D., Minn.) on NBC-TV and Walter Reuther, organized labor spokesman, on CBS-TV, Dr. Edward R. Annis of Miami, Fla., described the Kerr-Mills program as "sound and effective." He said it "must be given the chance it deserves."

"Congress passed it because it believed that the important thing was to help the people who need help; to help them quickly; and to help them through the machinery of local government," Dr. Annis said.

The American Medical Association Board of Trustees charged the CBS network with "misrepresentations, bias and distortions" on another program: "The Business of Health—Medicine, Money and Politics."

The network edited out of the taped program the A.M.A.'s true position on health care for the aged:

A.M.A.'S STATEMENT

"The A.M.A. believes that any medical care plan is both unsound and unfair which would compel working people to shoulder increased social security taxes to finance health costs of all those over 65 (under social security), rich and poor alike, regardless of whether they want or need such help and which, at the same time, ignores millions of indigent elderly who do need help."

Kennedy's health program faced strong opposition in Congress. The consensus of Capital Hill observers was that it stood a 50-50 chance of getting Congressional approval but not before it had been cut down. There were some who doubted that the Administration's program for medical care of the aged would be acted upon, at least by both houses of Congress before next year.

Even some Democratic Congressmen with the liberal label were taken back by the scope of Kennedy's health program.

CHAMBER OF COMMERCE OPPOSED

Arthur H. Motley, President of the Chamber of Commerce of the United States, warned that social security taxes are being increased to a point "where people might rebel against the whole social security system."

He contended that this nation's present personal medical care system is the best of any large nation.

"It's worth crusading for and that is what the Chamber is doing," Motley said.

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● full antibiotic activity ● lower milligram intake per dose ● up to 6 days' activity with 4 days' dosage ● uniformly high, sustained peak activity ■ **syrup** (cherry-flavored), 75 mg./5 cc. tsp., bottles of 2 and 16 fl. oz. Dosage: 3 to 6 mg./lb./day—in four divided doses. **pediatric drops,** 60 mg./cc., 3 mg./drop, 10 cc. bottles with calibrated dropper. Dosage: 1 to 2 drops/lb./day—in four divided doses.

PRECAUTIONS: As with many other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs discontinue medication. Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under observation.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle

Across Missouri

Ill-Conceived Health Plan

Under this title the *St. Louis Globe-Democrat* on Feb. 10, 1961, carried the following editorial and cartoon, which are reprinted here with permission.

"President John F. Kennedy's plan to launch into a new national health insurance program paid for by social security taxes, is a bad plan that misses the target. First, it would help only those who are covered by social security—and that is not the group ordinarily most in need of help.

"It is the men and women over 65 who do not get social security checks, or who are not covered by other pension plans, who need aid worst. They are not helped by the Kennedy plan.

"Secondly, the President's health plan does not provide protection against the 'disaster' type of illness, requiring long costly hospital care, which can wipe out a retired person's life savings.

"At most, it covers them for 90 days of hospital care a year. After that, they must meet their hospital expenses out of their own pockets. This is the exact opposite of the kind of protection that even well-fixed retired persons need.

"For these reasons, and others, *The Globe-Democrat* believes the plan is not in the national interest, and urges Congress to defeat it.

"This scheme for federal compulsory government health insurance is bound to discourage the growth of private health insurance programs —like Blue Cross and Blue Shield. These voluntary plans have run up a remarkable record of providing health care in the last few years.

"In 1945, only 29,000,000 Americans had hospitalization insurance; only 12,000,000 had protection for surgical expenses; only 3,800,000 had coverage for ordinary medical expense; almost none had insurance covering catastrophic medical costs.

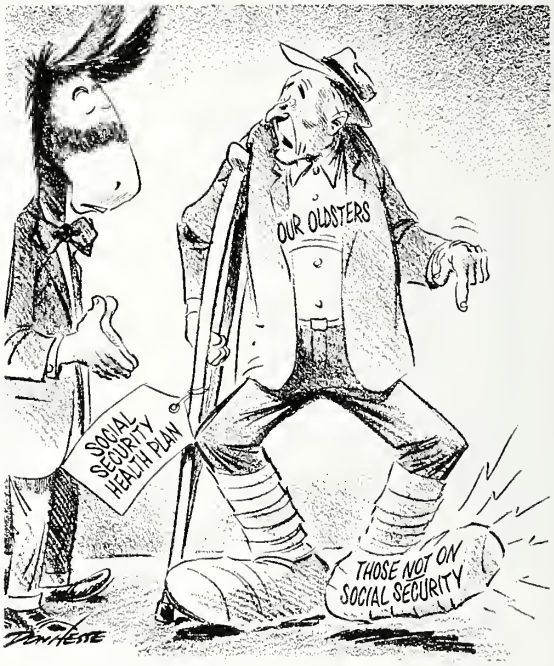
"By the end of 1959, all forms of this private-voluntary protection had shown amazing increases.

"More than 128,000,000 Americans had hospitalization like Blue Cross; 117,000,000 had surgical policies like Blue Shield; 82,000,000 had coverage for ordinary medical expense, and 22,000,000 had disaster coverage.

"This healthy growth of private health insurance—in only 15 years—is not likely to continue if Uncle Sam sets up a compulsory rival system.

"It calls for an increase of ¼ of 1 per cent out of every worker's salary, or from the income of self-employed. It also raises the amount on which these social security taxes will be paid, from the first $4,800 a year to $5,000.

'Ya Mean I Can't Have a Crutch for This Side?'



"That means those earning $5,000 annually in wages or salaries will get a $43.50 boost in taxes to finance this plan. The bite taken out of their pay checks will go up from $144 a year to $187.50! Thus a total tax increase of $1,500,000,000 a year!

"Employers, of course, will have to up their contributions also to the social security fund.

"In effect, the President's plan calls for compulsory federal health care for those who can afford private voluntary health insurance—and ignores those most in need of Uncle Sam's helping hand.

"The indigent aged and those made indigent by a long, expensive illness, presumably will have to go on relief.

"Last year, Congress passed a better bill for state and federal aid to the medically indigent which has been almost ignored by the states. They ignored it because they expected a proposal, such as the President now demands, to come up this year in Congress.

"The best way to help all elderly Americans get good medical care is to defeat the President's proposal. Then we get down to the business of implementing the plan now on the books."

Re: *New* Nonsteroid Chemotherapy of RHEUMATOID ARTHRITIS

Dear Doctor:

The "ideal" drug for rheumatoid arthritis would be "...one that is effective in the majority of those afflicted, and of such low toxicity that it can be given, in an effective dosage, for as many years as may be necessary to control the disease process in any given patient."[1]

The two drugs that currently come closest to the definition of "ideal" are aspirin and Plaquenil®. The outstanding safety of aspirin and its effectiveness in the treatment of persons with rheumatoid arthritis have been firmly established for decades. Recent clinical studies, extending over periods of from one to five years, have demonstrated that Plaquenil inhibits rheumatoid disease in the majority of patients[1] and that it is "...the least toxic of its class..."[2]

PLANOLAR* is a combination of Plaquenil and aspirin; each tablet contains 60 mg. of Plaquenil sulfate and 300 mg. (5 grains) of aspirin. An average initial dosage of 2 PLANOLAR tablets two or three times daily produces prompt relief of pain and discomfort in the majority of patients while initiating effective long-term therapy of the rheumatoid arthritic process.

Our PLANOLAR brochure contains a complete report of clinical experience and side effects as well as more detailed information on dosage. May we send you a copy?

Sincerely yours,
WINTHROP LABORATORIES

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1. Bagnall, A. W.: Antimalarial compounds in rheumatoid disease, *Canad. M.A.J.* 82:1167, June 4, 1960.
2. Cornbleet, Theodore: Discoid lupus erythematosus treated with Plaquenil, *A.M.A. Arch. Dermat.* 73:572, June, 1956.

*Planolar, trademark

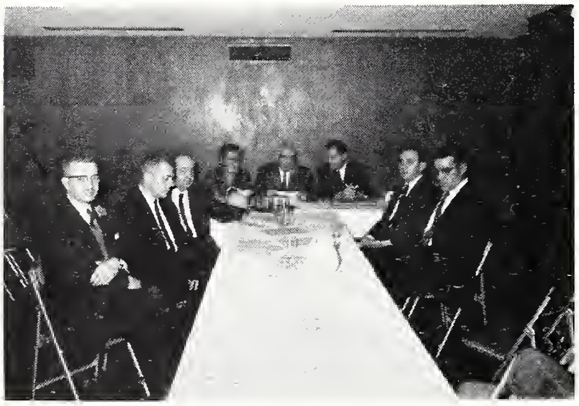
Plaquenil (brand of hydroxychloroquine), trademark reg. U.S. Pat. Off.

JOHN F. PEARL, M.D.

Missouri Academy of General Practice

A meeting of the Education Committee of the Missouri Academy of General Practice was held January 15 in Jefferson City for the primary purpose of planning the program the 13th Annual Assembly of the Missouri Academy to be held November 4-5, 1961, at Hotel Muehlebach in Kansas City. Members of the committee present were: Drs. Doyle McCraw, Bolivar, Chairman; Wyeth Hamlin, Hannibal; Paul Roberts, Sweet Springs; LeRoy Miller, Columbia; William Rost, St. Joseph; W. J. Stelmach, Kansas City; Chester Peck, Kennett, and John F. Pearl, St. Clair.

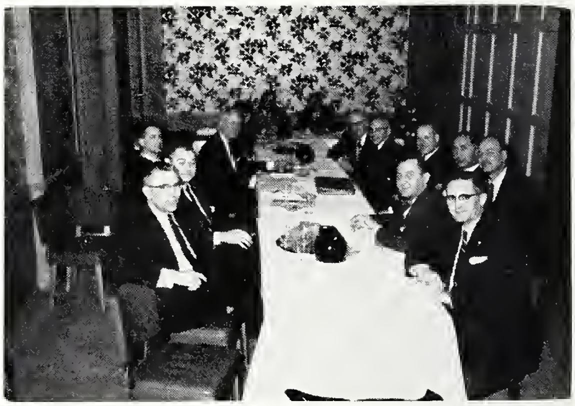
It was agreed by the committee that the basic pattern of recent assemblies of four symposiums, with added panel discussions, be continued. The four symposiums to be presented November 4-5 will be "Therapeutics," a "General Session," "Medicine" and "Surgery." The papers on each symposium will be limited to 20 minutes with the participants of a symposium participating in a question and answer period following the formal presentations. Speakers to date who have accepted the committee's invitation to appear on the program of the 13th Annual Assembly include: Ralph Reis, M.D., Chicago, editor of the *Journal of the American College of Obstetricians and Gynecologists;* Phil Thorek, M.D., Chicago, Surgeon; Ralph F. Bowers, M.D., Chief of the Surgical Service, Veterans Administration Medical Teaching Group, Kennedy Hospital, Memphis, Tenn.; Edward H. Kass, M.D., Professor of Internal Medicine, Harvard Medical School, Boston, Mass.; John J. Modlin, M.D., Professor and Chairman, Department of Surgery, University of Missouri Medical School, Columbia; and Paul O. Hagemann, M.D., Department of Internal Medicine, Washington University Medical School and Chief of Medicine, St. Luke's Hospital, St. Louis; Gilbert B. Kelley, Savannah, Mo.


Members of the Education Committee worked hard.

The President's Installation Banquet will be held on Saturday night, November 4, with the speaker to be selected by President Cecil Leitch of Blue Springs. The committee also discussed the possibility of holding a one day meeting during the summer at the Lake of the Ozarks with the program to encompass various subjects under the classification of medical economics. Tentative plans for this meeting call for the date to be Sunday, July 29, and the place, Arrow Head Lodge ont he Lake of the Ozarks, near Bagnell Dam.

Chairman McCraw also reported on a pilot film postgraduate program in Missouri being conducted with the cooperation of three medical societies, namely: Ozarks, Dallas-Hickory-Polk, and Marion-Ralls-Shelby. This project is sponsored by the American Academy Commission on Education with the aid of the Missouri Academy Education Committee. It consists of the showing of three teaching films to each of the societies mentioned including a discussant who is considered a specialist in the field depicted in each film.

On Sunday, January 29, a meeting of the Board of Directors of the M.A.G.P. was held in Jefferson City. The Board received, and ap-


Board members took time out for a picture.

proved, a report of the activities of the Education Committee. The Board also received a report from Barney Finkel, M.D., Chairman of the Publication Committee. This report came from the Publication Committee's meeting which was held just before the Board meeting. Dr. Finkel's report dealt with a proposal for a Missouri Academy of General Practice medical publication. On behalf of the committee, Dr. Finkel requested that the Board accept and make plans for a Missouri publication, the Board to set the time of starting it, based on further survey for an editor, contributors and legal advice. On motion, duly seconded, and following considerable discussion, the request was passed. It was agreed that when more definite information from the committee was available on the points presented in Dr. Finkel's request, the matter would be brought back to the Board. The name of the requested publication would be, *Missouri Family Physician.*

President Leitch presented to the Board a letter and resolution from the Kansas City Chapter of the M.A.G.P. requesting that the Missouri Academy of General Practice accept an invitation to cosponsor the 1961 Fall Clinical Conference of the Kansas City Southwest Clinical Society and that Category I PG credit be given this clinical conference. After much discussion and on motion of Dr. Leitch, duly seconded, it was voted to cosponsor the conference and to recommend approval of Category I credit to the A.A.G.P. Commission on Education.

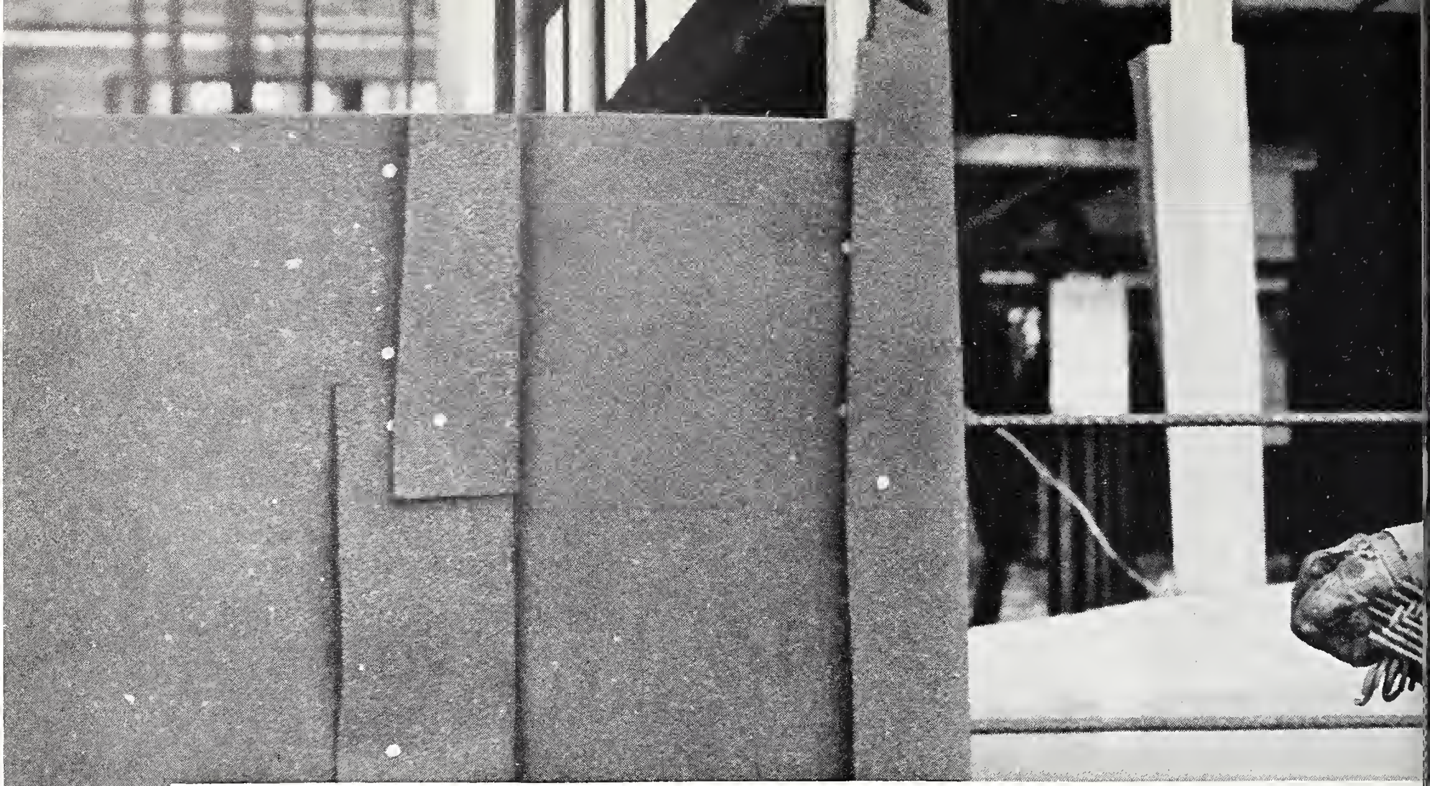
Thirteen members who had submitted satisfactory PG hours for the years 1957, 1958, and 1959, were reelected for another three year period of membership. Five members' reports of study credits for the years 1957, 1958 and 1959, were not complete. They were voted additional time, because of varying circumstances, to submit the required reports. Two members were voted to inactive status; resignations were accepted from two members, and Dr. W. A. Williams, Jr., Cape Girardeau, was transferred from the Tennessee Academy to the Missouri Academy as an associate member.

Dr. Elvin Imes, Chairman of the Public and Professional Relations Committee, reported that plans were under way to set up a meeting in Columbia for senior medical students to discuss with them the general practice of medicine. It is probable that this will be a luncheon session held during the Spring Clinical Conference at the University of Missouri Medical Center on May 11-12.

Dr. Charles Metz, Chairman of the Medico-Legal Committee read a bill which has been recently introduced in the Missouri Legislature relating to the competency of minors. Contents of the bill are as follows: Any lawfully married minor and any minor parent or legal custodian of a child, if otherwise competent to contract, shall be considered an adult for the following purposes only: to enter into a contract for medical or surgical treatment of himself, his spouse, his child, and any child in his legal custody; to consent to medical treatment and surgical operations for himself, his spouse, his child, or any child in his legal custody. This proposed bill has the full backing of the Board of Directors of the Academy.

The Missouri Academy Delegates to the 1961 A.A.G.P. Convention will present a resolution at the National Convention directed toward the encouragement of more physicians going into general practice. The contents of this resolution were presented by Drs. Casebolt and Shaw at the November 4, 1960, M.A.G.P. Board meeting. It was approved by the Board and subsequently at the general business meeting of the M.A.G.P. during the 1960 Annual Session.

The matter of the place for holding the 1962 Annual Assembly of the Missouri Academy of General Practice was discussed. It was unanimously voted to hold that session at Hotel Chase in St. Louis on November 3-4, 1962. The next meeting of the Board of Directors will be in Columbia on May 11, during the time of the Spring Clinical Conference at the medical school.



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Soma's prompt relief of pain and stiffness can get your low-back patients back to work in days instead of weeks

Soma is unique because it combines the properties of an effective muscle relaxant and an independent analgesic in *a single drug*. Unlike most other muscle relaxants, which can only relax muscle tension, Soma attacks both phases of the pain-spasm cycle at the same time.

Thus with Soma, you can break up both pain and spasm fast, effectively . . . help give your patient the two things he wants most: relief from pain and rapid return to full activity.

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only with higher dosages. Soma is available in 350 mg. tablets. Usual dosage is 1 tablet q.i.d.

The muscle relaxant with an independent pain-relieving action

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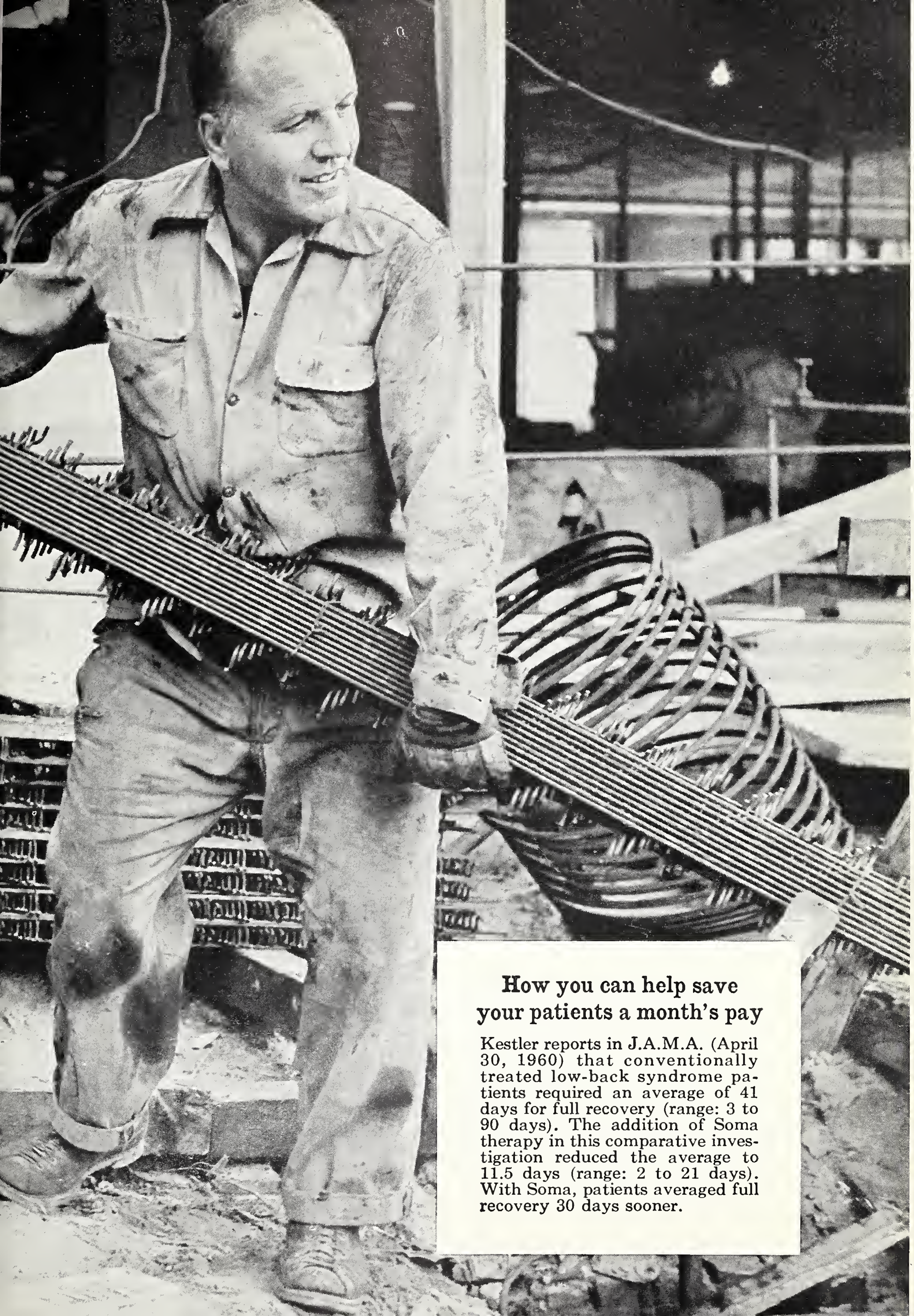
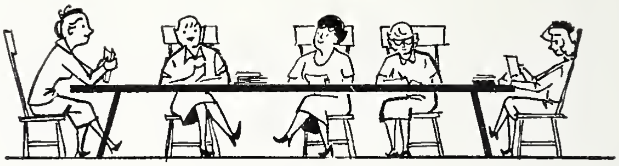


How you can help save your patients a month's pay

Kestler reports in J.A.M.A. (April 30, 1960) that conventionally treated low-back syndrome patients required an average of 41 days for full recovery (range: 3 to 90 days). The addition of Soma therapy in this comparative investigation reduced the average to 11.5 days (range: 2 to 21 days). With Soma, patients averaged full recovery 30 days sooner.

Woman's Auxiliary



In charting our course for the future, we always look to the past for guidance and direction. What a wonderful year of achievement and service our Auxiliary has had under the brilliant leadership of Ruth Kelling! From the individual members-at-large to the larger auxiliaries—all of the doctors' wives of Missouri united in giving service to their communities, their counties and our state.

Mrs. Frederick E. Wade

At our Convention we heard only a small portion of the activities of our members reported, and what a record of achievement! These reports, because of time limitation, were brief but they furnished an excellent outline of our interest and endeavors. I only wished the audience listening to these reports had been our critics, instead of our own understanding membership. We hear so much of the ifage we create in the public eye, and as I listened to these reports I could not help but think what each and every doctor's wife was doing in her home community reflected throughout our state and brought an appreciation for the ideals of our husband's profession and the knowledge they are shared and cherished by the doctor's wife.

It was with fear and trembling I embarked a year ago as your President-Elect. I felt with such capable teachers, Ruth Kelling and all our past presidents, that in one year of study, I might learn enough to carry on in an acceptable manner. It has been a joy and pleasure the past year to become so well acquainted with all of you throughout the state.

I know with our splendid slate of officers and committee chairman we will accomplish much this year. I also have a secret weapon, which I know will help us on our way. It is a large voluminous file labeled "Letters From Ruth." We are indebted to our national Auxiliary for direction, but I think our success comes from meeting the challenge on our local level. In one of my more recent "Letters From Ruth," I think I found the key, and I quote, "Have no fear of the year ahead. The thing to remember is that you are dealing with more than 1,700 exbership. We hear so much of the image we creand that they are sympathetic and willing to cooperate if the way is directed."

We have such a challenge in the year ahead—and our success depends not alone upon what your elected officers can do, but on the combined efforts of each individual member. Because the challenge is so great and covers so many areas, we appreciate that not every member and every Auxiliary will move forward at the same pace, but rather will specialize on the needs of the individual communities.

I hope as you read this we will be well along on our research for the Medical Resources Directory. This project assigned to us by the Missouri State Medical Association will be of inestimable value to our husbands in meeting special needs of their patients. We also believe that some local services may be expanded, when it is known they are carried on successfully in other areas.

A recent newspaper article quotes the *Journal of the American Medical Association* as stating, "Life expectancy in America may reach 120 years by the end of this century."

How solvent will such medical progress find the Social Security System? The present pressure to increase benefits, in addition to trebling the time benefits will be received, due to the increased life span, will find social security assets like Mother Hubbard's cupboard. I am sure no one would be found wishing to halt medical progress in order to keep the social security program solvent, but the impact on our economy is obvious.

Let us all work together this year in our communities for a better understanding of these problems. If our social and economic development can keep pace with our medical advancement our country will prosper. The present trend of increasing life expectancy and at the same time decreasing man's personal responsibility and productivity, makes us realize what the future may hold, if we do not make our voices heard.

Volume 58, Number 4—April, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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VERNON E. WILSON, M.D., *Columbia*

University of Missouri Medical Center Progress Report

A Special Article

A review of the accomplishments and activities during the last year at the School of Medicine of the University of Missouri are presented, together with problems facing the school and plans for the future.

Dr. Wilson is Dean of the School of Medicine and Director of the Medical Center.

As the Dean of the University of Missouri School of Medicine and the Director of the Medical Center, I consider it a privilege to have this second annual opportunity of giving a brief report concerning the activities of the University of Missouri Medical Center both in Columbia and throughout the state. The kindness of the Missouri State Medical Association in according this privilege of reporting through a University of Missouri issue of Missouri Medicine is in itself indicative of the fine relationships which have existed between the University and the practitioners of medicine during the last year. This close cooperation has in turn been productive of many improvements in the educational program. With the help and advice of the Council, the Committee on Rural Health, the Committee on Medical Education and Hospital, the MSMA staff, and many individuals throughout the Association, it has been possible to selectively study the areas which have been in the greatest need of alteration, both in education and service, and to institute necessary changes. It is an established fact that if a state medical school and its hospital are to meet the needs for which it was established it must have a close working relationship with the practicing profession. To this goal, which will ultimately result in the availability of increasing numbers of individuals who will wish to practice in Missouri, we have dedicated ourselves.

Changes in Personnel

The incoming first year class has been increased by five during each of the last two years with the class for the fall of 1961 having an intended enrollment of 85. Concurrent with these increases, 22 new positions have been established within the school of medicine and replacements have been found for all but one of the five individuals who, during the previous year, were lost due to unexpected death. All of those lost from this cause were young individuals; we were particularly saddened by the loss of Dr. Joseph Flynn, Chairman of the Department of Pathology; Dr. Jacob Roden, Chairman of the Department of Obstetrics and Gynecology, and Dr. Philip Hitchcock, Professor in the section of

Anesthesiology, Department of Surgery. These men were known to their peers throughout the state and in the medical education circles of the nation; the school has felt their loss keenly. Dr. Fred Lucas has replaced Dr. Flynn as Chairman of the Department of Pathology; Dr. Peter Calise has joined the staff to replace Dr. Hitchcock, and active recruitment is still in progress for a replacement for Dr. Roden. In the absence of a full-time Chairman, Dr. David Hall, as Acting Chairman, has been carrying on the teaching and service responsibilities in that department.

Although the balance of the new positions are too numerous to relate in detail, all of these individuals are people with special promise in academic work and of great value to the educational program.

Changes in Curriculum

An education committee has been working diligently throughout the year considering the objectives of the School of Medicine in terms of education per se and in terms of the need which the school was designed to meet. A report of their activities will be found in an article elsewhere in this issue. No major changes have been made in the curriculum to this point since it has been felt that the first responsibility was to round out the faculty and to make the present program operate as smoothly as possible before instituting new procedures.

Postgraduate Medicine

An office of Postgraduate Medicine has been established in cooperation with Dean Bryce Ratchford of University Extension. Professor Charles Koelling has assumed the post of Executive Director of Postgraduate Medical Education and will serve to coordinate services and extend them in your behalf. We look forward to a measurable increase in offerings such as the new one week In-residence Training Course in Cancer Detection offered conjointly by the School of Medicine and Ellis Fischel State Cancer Hospital.

At least nine formal courses will be offered on varied subjects during the coming year. The faculty will continue to respond to individual requests for presentations.

Changes in Facilities

The Clinical Research wing, which has been under construction for the last two years has now, to outward appearances, been completed. The almost interminable delays which set in as the final finishing touches are agreed upon by the various parties involved in such building are with us, but we optimistically look forward to occupying the building ahead of the time this issue will go to press. The temporary dormitory which has been placed into use for indigent patients not in need of hospitalization, but in need of out-patient diagnosis or care has worked well. As many as 60 persons have been housed in this facility at one time. We are happy to report that the University has assigned it to the use of the Medical Center for another year.

Changes in Hospital Procedures

Every attempt is being made to provide ready response to physicians who wish to refer patients to the Medical Center for consultation purposes. This has included the establishment of the position of Admitting Supervisor, filled by Mr. David Phillippe, who is intimately acquainted with the hospital and its personnel. A special admission telephone-switchboard arrangement has been installed and is now being interconnected with the various departmental phones so that incoming calls to the hospital from referring physicians can be routed quickly and directly to the person desired. This will allow the admitting office to register both the incoming and the return calls, when necessary, to assure prompt response. As this arrangement goes into full operation, your comments and helpful advice are solicited to assure its smooth operation.

Affiliations

A full professional affiliation has been achieved with Ellis Fischel State Cancer Hospital, providing for separate administrative and fiscal operation as in the past but for dual appointments for the professional staff and regular and intimate consultation between the two groups. This includes teaching by all appropriate faculty members in both institutions, the exchange of residents and the opportunity for elective work by medical students in the Ellis Fischel State Cancer Hospital.

Arrangements have been made with the Boone County Hospital for the teaching of obstetrics as it may be needed, although the increase in obstetrical referrals to the University Hospital has made this unnecessary to date. Closer working relationships have been mutually encouraged with and by practitioners in the Cities of Columbia, St. Louis, Springfield and Kansas City, many of whom have spent long hours in teaching in the Medical School program.

PATIENTS

An increased proportion of acute, relatively short term cases will make the operation of the hospital more efficient, both from a teaching and service point of view. It would directly increase the number of admissions per year. Obviously, it is the intent of the University to continue to assume an equitable share of long term cases but if we are to fulfill our primary obligation of maximum education for the health profession, it must be kept in mind that this is a *teaching hospital* which can accept indigent patients, not an indigent hospital per se; thus admissions need to be made *regardless* of *ability* to pay, not *because* of *inability* to pay. The ratio of chronic to acute patients being admitted to the Medical Center is slowly improving but is still in need of sympathetic and cooperative effort on the part of referring physicians. The number of students who can be taught in the clinical years is, in terms of accreditation, fixed by the number of new admissions to the hospital and Out-patient Clinic.

FINANCIAL SUPPORT

To justify the request to the legislature for support during the next two years, a comparison must be made between work accomplished in the last two years and projected for the next biennium. This is best expressed for the hospital in terms of patient days of care both as out-patients and in-patients. The increase in work load thus calculated will be approximately 35 per cent. The hospital is now fully opened with all 441 beds in operation at 80 per cent census, the predicted rate for the next two years. Out-patient clinic visits are now coming in at a rate above 40,000 per year. Since a high percentage of the out-patient visits are by patients not seen before, this has provided an adequate supply for present teaching needs.

The educational program including all full-time students, will likewise increase about 24 per cent between the two periods, this figure including medical students, nursing students, residents, medical technologists, x-ray technologists and graduate students.

The funds requested for the purposes of expansion represented an 18 per cent increase in funds for both the school and the hospital. The current recommendations sent to the Legislature by the budget division would provide an increase of 12½ per cent for expansion purposes in the budget for the School of Medicine, and 10½ per-cent increase for the hospital. It will not be possible to continue the program which has been established this year and planned for the coming two years (in fact the teaching program would be seriously handicapped if not endangered) unless the requests which have been submitted by the university are met in their entirety. These requests from the University were carefully reduced before submission to the State Budget Office to an absolute minimum. There is no way in which they can be appreciably reduced (as has been suggested in the recommendation forwarded to the legislature) without endangering the accreditation of both the school and hospital. It is our firm belief that the practicing profession of the state and the public do not wish to have a medical school which barely meets (or fails to meet) minimum requirements, but rather that they desire one which will provide an adequate number of practitioners for the health sciences who will have good education and training and who will measure creditably with practitioners educated elsewhere in the country. We earnestly solicit the advice and counsel of those interested in the program, both in assisting us in interpreting these needs to the proper sources of support and in looking for other possible modifications which would help to solve this immediate and pressing problem.

PRESENT DAY PROBLEMS

While the operation of a complicated organization such as a large medical center must necessarily have many problems of varying magnitude, there are certain key areas which serve either to amplify or to reduce many more or less related difficulties. No institution is any better than the personnel who serve in it. This is particularly true in educational institutions. We are quite proud of the faculty members who have chosen to come to the University of Missouri and feel that we have a faculty which ranks high on the national list in its potential. The second and equally important component is the quality of the students. Here the University of Missouri School of Medicine is faced with the same problem which is plaguing medical education throughout the United States. Fortunately it is here that cooperation between the practicing profession and the medical school can be productive of the greatest results.

From the November 12 issue of the *JAMA* it is noted that the number of high school students in the various states who are going into the study of medicine varies quite widely. As mentioned in the report of the Committee on Education (elsewhere in this issue), only one state in the country which has a medical school has a lower percentage of high school graduates entering the medical profession; all of our surrounding states are well above us in this regard. It is quite evident that the declining number of A students and the increasing number of C students going into the study of medicine is directly related to the fact that recruiting for the health professions in the high schools and colleges is lagging. Many factors are involved in this, some of which have to do with increasing opportunities in other fields, scholarships which are available for the graduate students but not available for medical students and, perhaps most important, the lack of coordinated and concentrated effort on the part of teachers and physicians to guide promising young people in the direction of medical practice.

With the appointment of a new Assistant Dean, Dr. William Mayer, who will have this as one of his chief responsibilities, the School of Medicine will make every effort to fulfill its share of this obligation. The faculty welcomes opportunities to visit in high schools and colleges during their career days. Our catalog has been brought up to date and is available to anyone interested. Attractive brochures are being planned with the thought that they might be distributed to those who wish to use them in their contact with students. The Dean's Office has copies of a package entitled "Medical Careers" sponsored by the American Medical Association which is of help to physicians or any interested individuals who wish to participate in the career recruitment program. We solicit written inquiries from high school and college students in the hope that their further interest can be stimulated.

With the concerted effort of all concerned we can view this problem with great optimism; without such concerted effort there is great reason to question the quality of medicine in Missouri which will be available and practiced in the future.

Summary

This has been a thumbnail sketch of activities in the School of Medicine and the Medical Center during the past year. We look forward with optimism to the results of continued and increasing cooperative endeavors with the practicing profession during the coming years. It is our hope that through the postgraduate endeavors and the development of common interests an ever increasing number of physicians throughout the state will feel free to consider the University of Missouri as the center for their further study of medicine and for help on a consultation basis. We in turn solicit their advice and counsel which is basic to the development of a good and potentially outstanding program. May I personally take this opportunity to invite each and every one of you to visit your Medical Center and make use of its facilities whenever possible.

E. J. WIPFLER, JR., M.D.; CARL H. ALMOND, M.D.;
IAN M. THOMPSON, M.D., *and* T. E. KEATS, M.D., *Columbia*

Intravenous Aortography

Surgical correction of vascular lesions is now an accepted and desirable form of therapy.[1, 2] The results of such intervention have stimulated a continuing search for improved technics to clarify and diagnose vascular lesions.

In the investigation of 50 vascular lesions at the University of Missouri intravenous aortography has been found to be a safe technic, which is diagnostic for thoracic, abdominal and peripheral arterial lesions and a good screening procedure for renal vascular lesions producing hypertension.

A safer method of aortography has been developed which now makes it possible to extend the benefits of this diagnostic examination to a much larger group of patients. The experience using intravenous aortography at the University of Missouri Medical Center is described and illustrated.

Dr. Wipfler is Assistant Instructor in Surgery; Dr. Almond is Assistant Professor of Surgery; Dr. Thompson is Associate Professor of Surgery (Urology), and Dr. Keats is Professor of Radiology at the University of Missouri School of Medicine.

Intravenous aortography is an extension of intravenous angiocardiography as described by Robb and Steinberg[3] in 1938. A total of 80 to 100 cc. of 85 per cent or 90 per cent diatrizoate sodium (Hypaque), is injected simultaneously through 12 gauge Robb-Steinberg angiocardiographic needles with 50 cc. Robb-Steinberg syringes into the median anticubital or basilic vein of each arm. Serial filming (two films per second) is performed utilizing Schonander serialographic equipment. Decholin arm to tongue time minus four seconds determines the initiation of the serial filming. Peripheral vessels are demonstrated by single exposure using portable radiographic equipment. Pyelograms may be obtained by delayed filming of the abdomen.

Eight case reports are presented as illustrative of examples of the usefulness of intravenous aortography in the diagnoses of vascular lesions.

Case Reports

Case 1. E. T., a 60 year old male, first noted a pulsatile midabdominal mass three years prior to admission, with recent symptomatic enlargement and vague abdominal pain. A fusiform abdominal aortic aneurysm was demonstrated by aortography (fig. 1). A repeat intravenous aortogram six months later showed no change in the outline of the aneurysm.

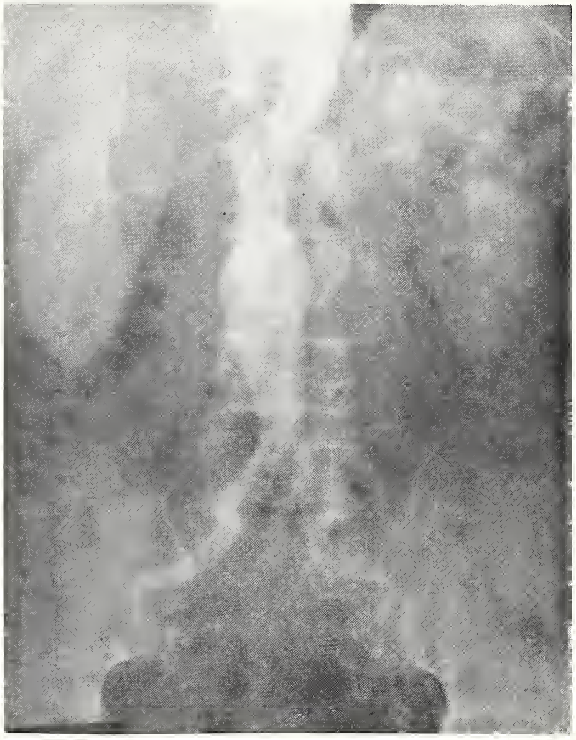


Fig. 1. I.V. aortogram shows a fusiform abdominal aortic aneurysm.

Case 2. C. C., a 64 year old male, was noted two years previously to have a pulsating supra-umbilical abdominal mass. Six months prior to admission, he began to experience occasional mild aching low abdominal and back pain. An intravenous aortogram demonstrated a uniformly dilated abdominal aorta, with dilatation extending into the iliac arteries, and a consistent narrowing of the left renal artery in this normotensive male (fig. 2). A postmortem examination (death due to unrelated causes) revealed a large fusiform aneurysm of the distal abdominal aorta

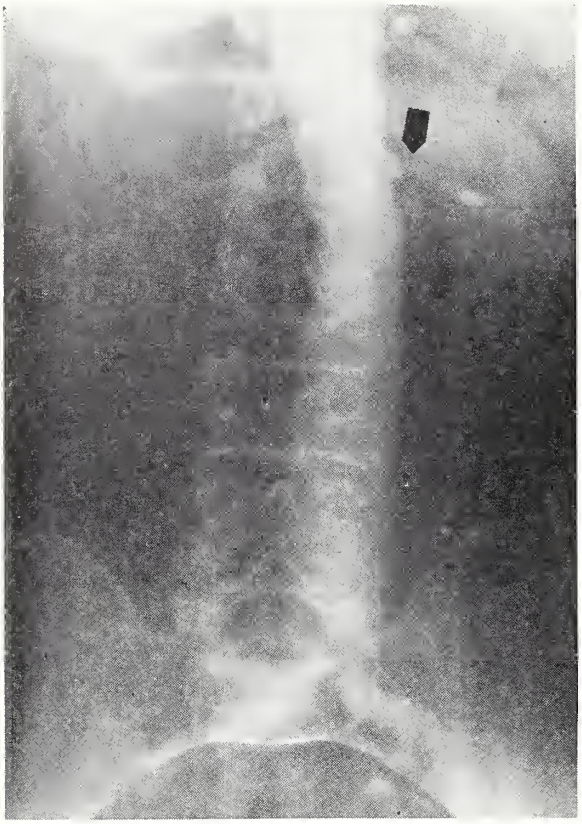


Fig. 2. Diffusely and uniformly dilated abdominal aorta and iliac arteries are noted. An incidental finding was a consistent narrowing of the left renal artery. This 64 year old male was normotensive.

and the renal artery constriction without related renal disease.

Case 3. D. G., a 56 year old female, with left upper quadrant intermittent, vague, aching pain of five years duration, was found to have a nonfunctioning right kidney and a calcified left upper quadrant mass. Retrograde pyelography was unsuccessful in demonstrating a right ureter or kidney. Intravenous aortography demonstrated a splenic artery aneurysm, increased opacification of the spleen, visualization of the portal system four seconds after visualization of the splenic artery, and an absent right renal artery (fig. 3). Although suggestive of an arterio-venous fistula of the splenic vessels, none was found at time of splenectomy and excision of a small, cystic, right renal remnant.

Case 4. H. V., a 60 year old male presented with a four year history of progressive intermittent claudication of both thighs, and was found to have an absent right and a very weak left femoral pulse. Occlusion of the right common and left external iliac arteries was visualized by intravenous aortography as well as a partial occlusion of the left renal artery with post stenotic dilatation (fig. 4). This patient was normotensive.

Case 5. E. C., a 51 year old male complained of intermittent progressive claudication of the left leg for four years. Left dorsalis pedis pulsations were very weak. Intravenous aortography, including a roentgenogram of the thighs to visualize the femoral vessels, demonstrated occlusion of the femoral artery in Hunter's canal, with excellent collateral circulation (fig. 5). Lumbar sympathectomy resulted in significant diminution of the claudication.

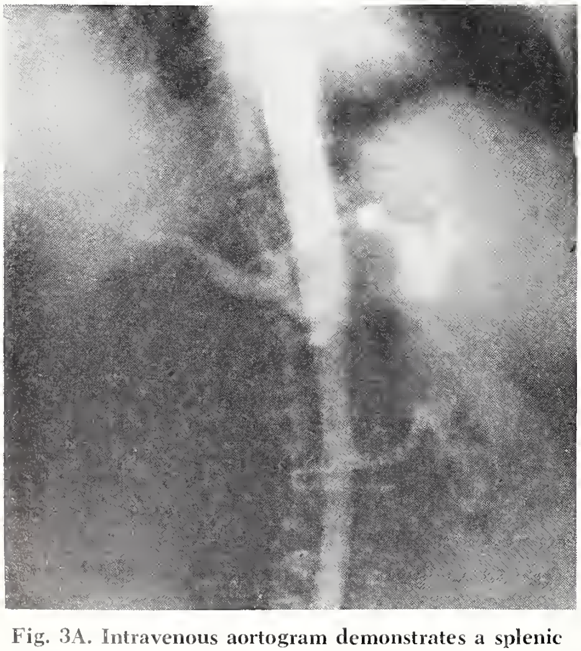
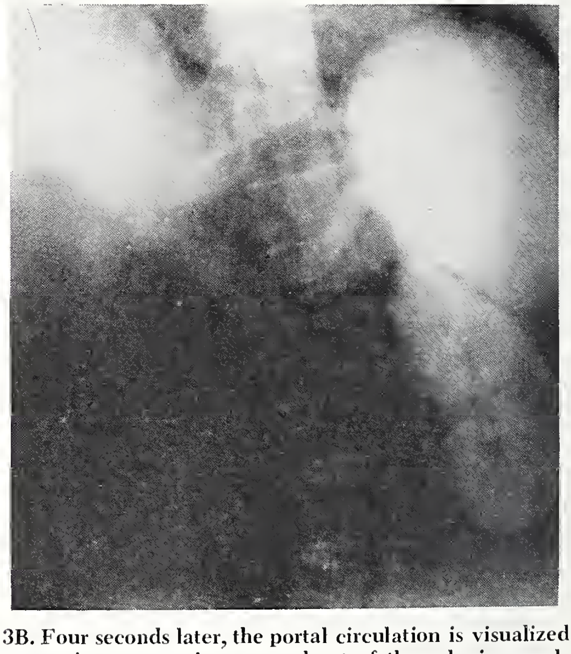


Fig. 3A. Intravenous aortogram demonstrates a splenic artery aneurysm and absence of the right renal artery.



3B. Four seconds later, the portal circulation is visualized, suggesting an arterio-venous shunt of the splenic vessels.

Case 6. C. P., an 18 year old male, underwent an appendectomy elsewhere and was found to have a right renal mass and hypertension. Intravenous and retrograde pyelograms showed massive hydronephrosis and a filling defect extending obliquely across the lower portion of the dilated renal pelvis (fig. 6A). Intravenous aortography demonstrated an anomalous renal artery which coincided in position with the filling defect (fig. 6B). At operation, this vessel was confirmed as the etiology of the obstruction to the lower pelvis, and a pyeloplasty was performed. Hypertension ranging from 160/100 to 210/125 returned to within normal limits immediately following pyeloplasty.

Case 7. M. H., a 71 year old female, presented with an epidermoid carcinoma of the ear and enlarged cervical nodes. The primary was excised, and a radical neck dissection was performed, with microscopic findings of lymphosarcoma of the cervical nodes. An intravenous pyelogram (fig. 7A) and a retrograde pyelogram showed compressed and distorted right lower pole calyces, with superior displacement of the collecting system. Intravenous aortography demonstrated avascularity of the lower pole of the right kidney (fig. 8), and the nephrographic phase of the aortogram showed absence of opacification (fig. 7B), suggesting the presence of a lower pole renal cyst.

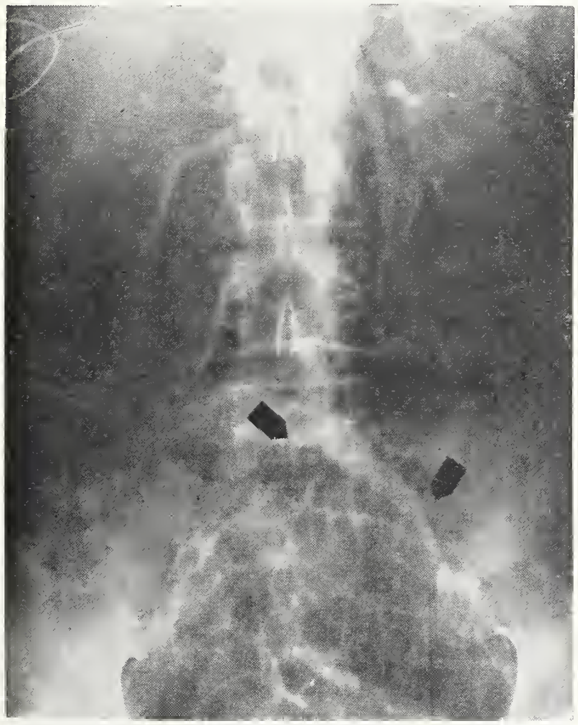


Fig. 4. Intravenous aortogram demonstrates advanced arteriosclerosis with occlusion of the right common and left external iliac arteries and a partial occlusion of the left renal artery with post stenotic dilatation. This 60 year old male was normotensive.

Case 8. E. C., a 35 year old female, presented with a gradually enlarging left flank mass of one year duration, dull aching pain in the area for four months and hematuria for three months. During this period, she had lost 50 pounds. Intravenous and retrograde pyelograms demonstrated a left ureteral calculus with a large hydronephrotic left kidney. Intravenous aortography showed the arterial system of the left kidney to be elongated and stretched (fig. 9), suggesting massive pyonephrosis, which was confirmed at time of nephrectomy.

DISCUSSION

In our present series of 50 intravenous aortograms, 32 were of excellent quality, nine were considered good, three were poor but still afforded diagnostic information and five were unsatisfactory. No serious complications were encountered. Mild transient nausea occurred in one third of the patients, with three instances of emesis shortly following injection of the contrast medium. In a combined series of 650 examinations collected by personal communications,[4, 5] one death was reported. This was a 74 year old male with advanced generalized arteriosclerosis. The only serious complication occurred in a patient with angina and previous myocardial infarctions. He developed precordial pain shortly following the examination, and was proven to have had another myocardial infarction.

Intravenous aortography was described in early reports as technically undependable due to

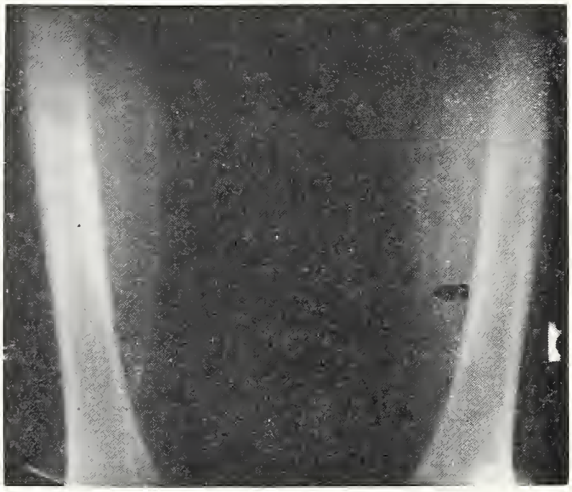


Fig. 5. Roentgenogram, made as a continuation of intravenous abdominal aortography, demonstrates the usefulness of the procedure in peripheral angiography, and shows occlusion of the left femoral artery with good collateral circulation.

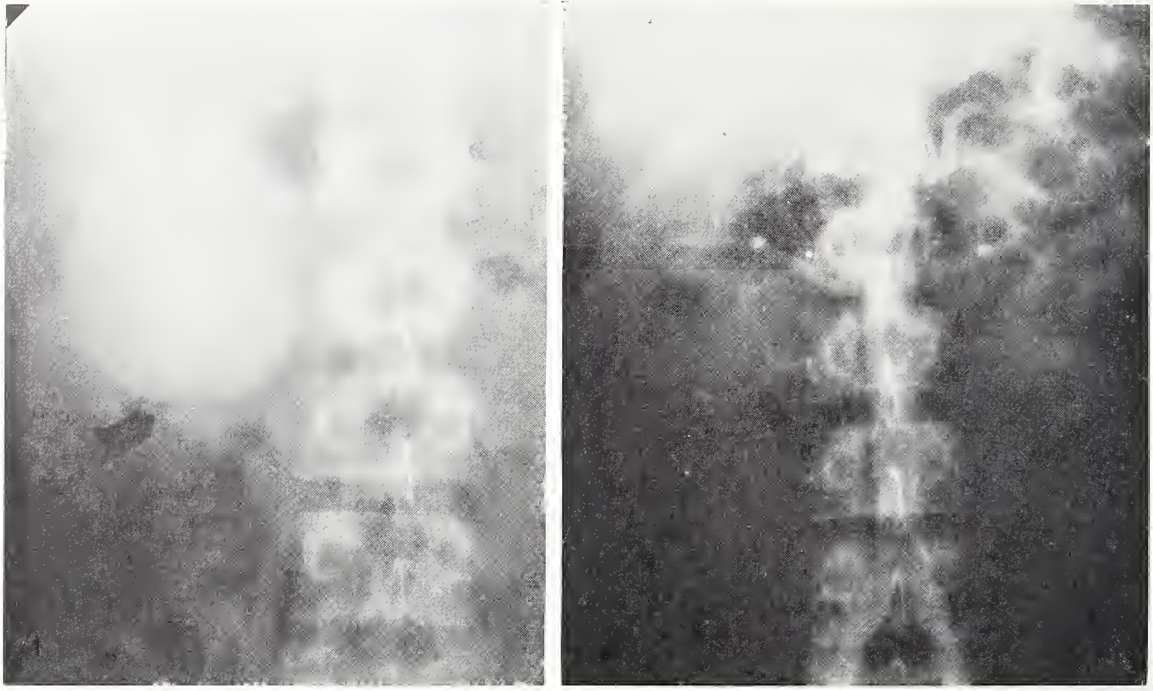


Fig. 6A. Retrograde pyelogram shows massive hydronephrosis with a filling defect extending obliquely across the lower part of the renal pelvis. **6B.** The aortogram shows an anomalous renal artery which coincides with the filling defect, and which proved at operation to be the cause of obstruction.

the frequency of unsatisfactory visualization. Early failures in our series lent support to this criticism. However, as more experience was gained, marked improvement in the visualization of the aorta and its branches led to a more extensive and diversified use of this diagnostic technic. It has become apparent that to achieve consistently satisfactory diagnostic studies the following points of technic must be adhered to:

1. Careful explanation to the patient of the sensations accompanying the injections, and of the importance of avoiding movement during the filming.
2. Administering a cathartic the evening prior to the examination.
3. No fluid or food by mouth four to six hours before the examination.
4. Pentobarbital, 100 mg., by mouth 15 to 30 minutes before insertion of the needles.
5. Selection of the basilic vein bilaterally for needle insertion. (Even though the cephalic vein appears more prominent, experience has shown that the basilic vein, although small, is the more direct route to the superior vena cava, and that there are fewer collaterals into which the contrast material may pool.)
6. Routine use of small incisions to expose the basilic veins, in order that a ligature may be placed around the vein at the base of the twelve gauge needle.
7. With the patient in a supine position, elevation and slight abduction of the arms prior to the injection.
8. Timing of the injection with the start of normal inspiration.
9. The beginning of serial filming four seconds earlier than the Decholin circulation time.

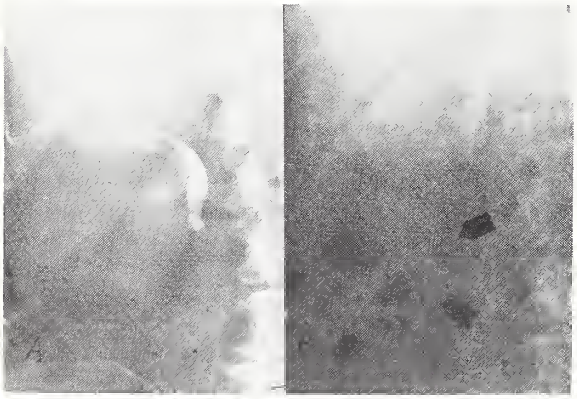


Fig. 7A. Intravenous urogram shows superior displacement and distortion of the right collecting system. **7B.** The nephrogram phase of the aortogram shows absence of parenchymal opacification, suggesting a renal cyst.

The initial appearance of the contrast medium in the proximal abdominal aorta can vary from four seconds less, to four seconds longer than the Decholin arm to tongue circulation time. Because of this discrepancy, we have chosen to use serialograph filming in most instances, rather than two or three second multiple exposures. Radioactive iodine-tagged Renografin arm to abdominal aorta circulation timing, using a scintillation counter directed at the aorta, is now used. Close correlation with contrast medium appearance has been found, and if this continues to be consistent, electronic triggering of the serialograph equipment will be used. This would make laminographic filming of vessels more feasible, particularly for the renal arteries in the evaluation of hypertensive patients.

The accompanying roentgenograms illustrate the variety of vascular abnormalities which can be demonstrated by intravenous aortography. Of equal importance, in three emergency situations, this method has been used to rule out suspected rupture of an aneurysm. Peripheral arterial pathology can be clearly delineated (Case 5). On one occasion, we were able to demonstrate an occlusion of the proximal posterior tibial artery. The consistency with which the renal arteries have been clearly outlined is of interest in that three instances of incidental partial occlusion of the renal arteries, without hypertension, have been found. Because of the precise delineation of renal arterial pathology, we are using this method to screen selected patients with hypertension of possible renal vascular origin.

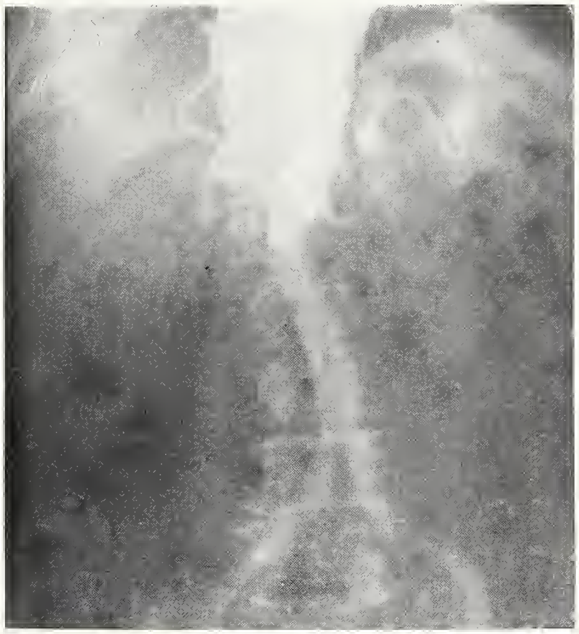


Fig. 8. Avascularity of the lower portion of the right kidney is demonstrated by an intravenous aortogram.

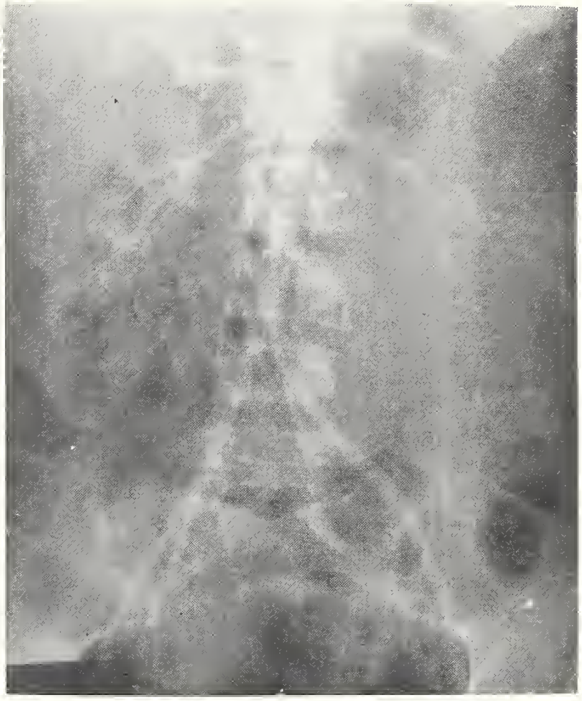


Fig. 9. Intravenous aortogram shows attenuation and spreading of the left renal arteries in a patient with pyonephrosis secondary to a distal ureteral calculus.

SUMMARY

Intravenous aortography is an effective method for visualization of the thoracic and abdominal aorta, their branches and the major arterial supply of the extremities. This technic is associated with low morbidity and mortality. Perhaps its greatest usefulness is in patients with disease of the abdominal aorta and its branches. The technic appears to be readily applicable as a screening method for renal artery disease in patients with hypertension.

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The Effects of Adrenal Cortical Hormones on Blood Lymphocytes

The changes which occur in the numbers and morphology of the circulating lymphocytes in response to stress or to the action of adrenal cortical hormones are reviewed and some additional evidence for hormonal control over these changes is presented.

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This work was supported in part by Grant No. RG-59-8, The Leukemia Guild, National Blood Research Foundation.

Controlled experiments in both animals and man have firmly established the importance of the 11-17-oxysteroid hormones of the adrenal cortex in the decrease in numbers and percentages of the circulating eosinophils and lymphocytes.[1, 2] These leukocyte changes are still used routinely for the assessment of adrenal activity in the "stress" or adaptation responses of experimental animals, and in assays of the biological activity of numerous steroid preparations.[3, 4] Although frequently employed in the diagnosis of adrenal insufficiency in clinical practice, a number of variations in results have produced criticisms preventing their widespread use.[5, 6, 7] It is my purpose to review briefly the changes which occur in the numbers and morphology of the circulating lymphocytes in response to stress or to the action of adrenal cortical hormones, and present some additional evidence for hormonal control over these changes.

Changes in the Numbers of Blood Lymphocytes

The lymphocyte response after administration of ACTH and adrenal hormones was first reported by Dougherty and White.[8] They observed that a marked lymphopenia and variable neutrophilia occurred in the peripheral blood after administration of these hormones to animals. The effects were also extensive in lymphatic organs where large areas of reaction were described. Cytolysis and cytoplasmic budding, karyorrhexis and decreased mitotic activity occurred, accompanied by a significant decrease in size and weight. The lymphopenic response did not occur in adrenalectomized animals after injection of ACTH, establishing the role of the adrenal steroids in mediating the response.[9]

In addition to the lymphopenic response, an increase in the numbers of lymphocytes may also provide information on adrenocortical function. In non-stressed adrenalectomized animals the lymphocyte counts are slightly higher than in non-stressed intact controls. When these adrenalectomized animals are subjected to a variety of types of stress,[10, 11] the lymphocyte count rises markedly above that in non-stressed adrenalectomized controls. This increase was termed the "lymphocytotic response" by Dougherty and Kumagai[10, 11] and is an almost exact opposite of the lymphopenic response which occurs after stress in animals with normal functioning adrenals. A slight increase in the lymphocyte count in human patients with adrenal insufficiency is well known.[12-16]

Changes in the Morphology of Blood Lymphocytes

Clinical use of the morphologic changes in lymphocytes has been a standard diagnostic procedure for infectious mononucleosis since Downey *et al.*[17, 18] described the occurrence of the atypical lymphocytes in this disease. They carefully described three cell types which were named type I, type II and type III lymphocytes. It is now known that these cells, especially the type II, may occur with varying frequencies in a large number of other clinical conditions.[19]

During the lymphocytotic response in stressed, adrenalectomized animals, it was noted that a large number of the lymphocytes possessed an increased amount of pale staining (hyaline) cytoplasm.[10] The number of these "stress" lymphocytes increased in proportion to the degree of stress stimulus imposed on the animal.[11] After treatment with adrenal steroids a lymphopenia results, which is due mainly to a decrease in the smaller, normal lymphocytes.[20] The increased ratio of stress to normal lymphocytes also occurs in animals with a normal functioning adrenal when a severe or prolonged stress in encountered.[11, 21] These results showed that the two types of lymphocytes had a different degree of sensitivity to the action of the adrenal hormone.

Frank and Dougherty[19] reported that the stress lymphocyte of mice appears identical with the Downey type II lymphocyte in man, and that the same increased ratio of stress to normal lymphocytes (lymphocytic index) was observed after stress in the human. In addition, the blood 17-hydroxycorticoid levels showed that when the blood steroids were increased the normal lymphocytes were decreased, but the stress lymphocytes were only slightly affected.

NORMAL DIURNAL VARIATION OF BLOOD LYMPHOCYTES

In the last ten years diurnal variations have come to be recognized as an important variable to be considered when evaluating blood leukocyte counts. A large diurnal variation for all the circulating leukocytes of mice was reported by Brown and Dougherty.[22] This is a normal physiological response mediated by adrenal cortical hormones since adrenalectomy abolished the diurnal changes. Diurnal variations have also been reported in the blood levels of adrenal hormones which correlate well with the leukocyte variation.[23]

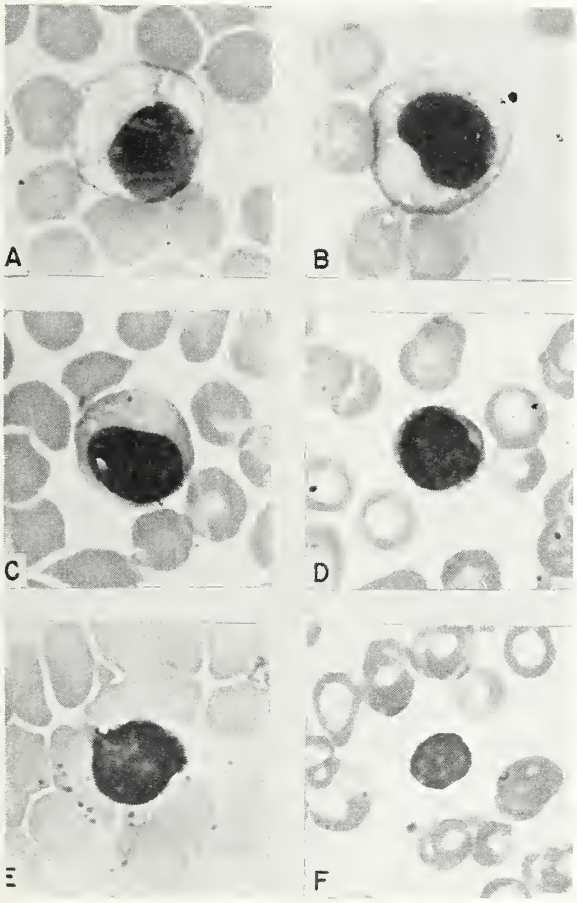

Fig. 1. A and B, Downey Type II or Stress Lymphocytes; C and D, large and small normal lymphocytes; E and F, large and small acytoplasmic lymphocytes.

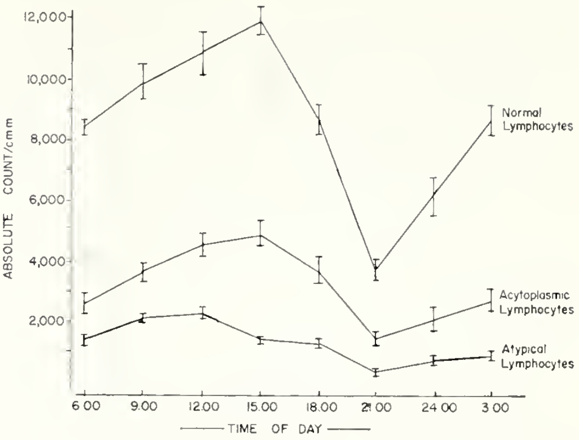

Fig. 2. The diurnal variation of normal, acytoplasmic and stress lymphocytes in tail vein blood of C-57-black mice.

A large diurnal change was found for the total circulating lymphocytes in mice[22] and man.[24] The diurnal changes for three morphologic classes of lymphocytes are reported. A third class of lymphocytes is included here in addition to the normal and stress lymphocytes to give a broader range of cell size on which to compare sensitivity to the hormone. The third group of lymphocytes are small cells with no distinguishable cytoplasm and appear as "naked" nuclei. Frequently, the nuclei show degenerative changes, but were counted as long as the chromatin retained the typical lymphocyte clumped pattern and shape. These cells probably represent end products of lymphocyte heteroplastic differentiation and will be referred to here as "acytoplasmic lymphocytes."

It can be seen from figure 2 that all three types of lymphocytes undergo a marked diurnal variation in mice. Since the mouse is a nocturnal animal, its active period with high blood and urinary steroid levels and low lymphocyte count occurs at night, with the lowest cell count in the late evening. Conversely, the highest cell count occurs in the early afternoon. This is just the reverse of the human in whom the highest blood steroids and the lowest eosinophil and lymphocyte counts are found in the late morning.

It can be seen from figure 3 that adrenalectomy abolishes the diurnal variation for all three cell types, establishing the role of the adrenal gland in this response. The cell counts in the adrenalectomized animals were taken at the two times of day when the lymphocytes were at the highest and lowest values during the normal diurnal cycle. If any diurnal change remained it should be found when comparing these two periods. No significant difference is found between the counts taken at these two periods in adrenalectomized animals.

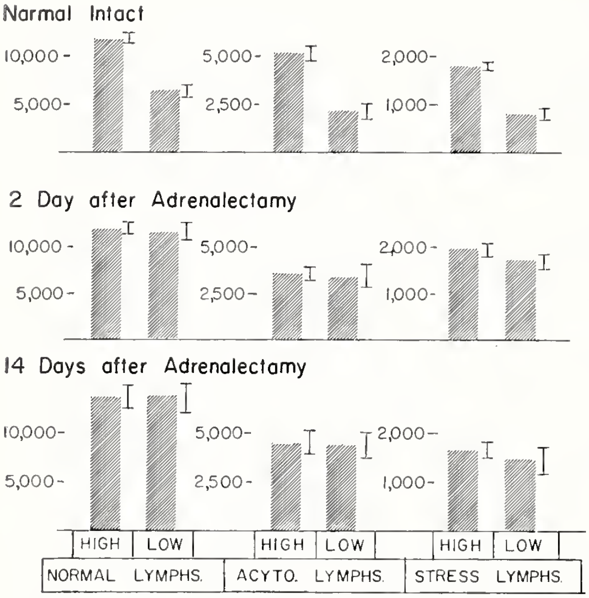

Fig. 3. The effect of adrenalectomy on the diurnal variation of normal, acytoplasmic and stress lymphocytes from tail vein blood of mice. Counts taken during the high and low periods of the normal diurnal cycle.

The Effect of Stress and Hydrocortisone

Figure 4 shows the total numbers and percentages of the three types of lymphocytes in three groups of animals with normal functioning adrenals. The counts for all three groups were taken at the period of the normal diurnal cycle when the cells were at their highest values to allow the maximum response and prevent diurnal differences between groups. The first group of animals were normal untreated controls. The second group was subjected to the mild stress of an intraperitoneal injection of 0.1 cc. of sterile, pyrogen free saline solution. The third group received the saline solution containing 100 micrograms of hydrocortisone acetate and the small amount of commercial vehicle in which the steroid was suspended. Both treated groups were injected three hours previous to the time blood samples were taken. The percentage values given are the per cent of total lymphocytes instead of percentages of total white blood cells in order to prevent the masking of the relationship of the three types of lymphocytes by changes in number of other leukocytes.

The results presented in figure 4 show the typical lymphopenic response to stress or hydrocortisone in the normal and acytoplasmic lymphocytes. The hydrocortisone plus stress group show much the larger response. In the animals receiving the stress alone, the large type II cells show an actual increase in total numbers (lymphocytotic response) confirming the results of Dougherty and Frank.[20] In animals receiving both stress and hydrocortisone a moderate lymphopenic response occurs, indicating that hormone administered at the same time as the stress can prevent the increase in total number of stress cells.

The percentage values of the three types of lymphocytes show excellent confirmation of the differential effect of adrenal hormones on the cell size distribution. The acytoplasmic cells show a decrease in both total numbers and percentage in the two treated groups of mice when compared to the untreated controls. The larger nor-

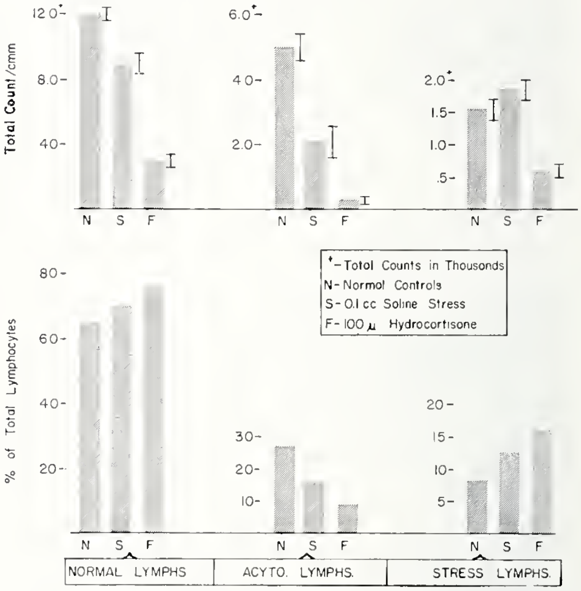

Fig. 4. The effect of mild stress and low hydrocortisone dose on the differential count of the circulating lymphocytes in normal mouse tail blood.

mal lymphocytes show a large decrease in total numbers, but an actual increase of 10 per cent and 20 per cent in the stress and stress plus hydrocortisone treated animals respectively. This indicates less sensitivity than the smaller acytoplasmic cells. The large type II (stress) cells show an increase in both total numbers and percentage (75 per cent) in the group receiving stress alone, when compared to untreated controls. In the group receiving stress plus hydrocortisone, even though a small lymphopenic response is found in total numbers, an increase of 100 per cent is produced in percentage over untreated controls. These cells, therefore, are far less sensitive to the hormone than the other two cell types.

COMMENTS AND CONCLUSIONS

The results of these experiments support the concepts of Dougherty[2, 25] that the growth and involution of lymphatic tissue and lymphocytotic and lymphopenic responses of the circulating cells represent a balance between two opposing factors; a factor which stimulates the growth of lymphatic tissue and the increase in numbers and cell size of lymphocytes, and the active adrenocortical hormones which inhibit the growth and reduce cell size.[25] The hormone effect occurs through inhibition of mitotic division and stimulation of the processes of maturation which produce the small normal lymphocyte[2, 25] and eventually the acytoplasmic end product as shown. Since the smaller cells are also more sensitive to adrenal steroid action, they show the most marked decrease in numbers.

The atypical lymphocytes (Downey cells) show a departure from the normal maturation in response to stress or other causes. The increased amount of hyaline cytoplasm of the type II (stress) lymphocyte may be due in part to intracellular hydration since the total cellular protein is not increased.[2] The daily maturation and turnover rate of large numbers of lymphocytes may play an important part in the supply of protein, DNA, and other materials essential for growth and metabolism of body tissues.[26, 27]

From the data presented it appears that a more careful consideration of changes in lymphocyte morphology may provide important information for the evaluation of adrenal function. The relationship of these lymphocyte changes to stress and relative adrenal insufficiency may also provide an additional means of assessing the need for hormone treatment and the optimal dosage of hormone during steroid therapy.

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Benign Cystic Ovarian Enlargements

The Diagnosis and Management

Surgical procedures involving the female pelvic genitalia are amongst the most frequently performed operations.

In eliciting past medical information from gynecologic patients, a history of previous unilateral and sometimes bilateral oöphorectomy is obtained in a significant number of instances.

Because of obvious difficulties in accurate preoperative diagnosis, the frequency of physiologic cystic ovarian enlargement and the relative accessibility to and ease of resection of the paired ovarian structures, it is not unlikely that many patients have been needlessly subjected, not only to unnecessary general anesthetic and operative risk, but also to premature deprivation of ovarian endocrine function.

This concern is strengthened by the studies of Doyle who reviewed 546 gynecologic operations performed in the Los Angeles area hospitals.[1] A total of 704 of the ovaries which were removed were normal or contained dysfunctional cystic enlargements. Similar findings were reported by J. Edward Hall in a review of 665 cases from Brooklyn Hospital.[2] In both series, many of the oöphorectomies were performed in conjunction with other gynecologic procedures, the most common being hysterectomy. Doyle's series was corrected to exclude conditions such as endometrial carcinoma, where removal of normal ovaries is indicated. One hundred and twelve of these patients had a preoperative diagnosis of ovarian cyst, with pathologic substantiation of the diagnosis in only 22, and nine instances of ovarian or tubal endometriosis.

The importance of normal ovarian function in sexual development, menstruation and reproduction, is established. Although all aspects of ovarian endocrine activity are not well clarified, deprivation of estrogenic function, particularly in the reproductive age group, in terms of vasomotor instability, as well as changes in the genitalia, skin and hair, are well appreciated. There is some evidence to indicate a relationship of hypertension and arteriosclerosis to loss of ovarian function. Furthermore, evidence suggests that the ovaries continue to produce some estrogens in many patients long after menopause. It would appear, therefore, that it is desirable to preserve normal ovarian tissue whenever possible.

Diagnostic Interptetation of Ovarian Enlargements

Increasing recognition by both physicians and the lay public of the importance of periodic pelvic examinations and the ready accessibility of the ovaries to palpation, brings the problem of ovarian enlargement to all physicians who see and examine female patients.

The majority of ovarian tumors are cystic, physiologic and, for the most part, asymptomatic. Difficulties in diagnosis are concerned largely with decisions as to whether the cystic enlargement is neoplastic or dysfunctional and problems engendered by extreme variations in anatomic size. Most difficulties in diagnostic interpretation involve either very small, or excessively large ovarian cystic processes.

A general plan of management is suggested to avoid the high incidence of ovarian surgery and the possibility that many normal ovaries are inadvertently removed, due to the difficulties of diagnosis because of the extreme variations in the size of ovarian cysts.

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Symptoms caused by ovarian cysts may sometimes prompt the patients to seek medical attention. These may be related to pressure, due to either size or location of the tumor. A vague sensation of heaviness in the pelvis, urinary frequency, constipation, pain on defecation, edema of the legs, and dyspnea may be found, usually due to purely mechanical factors. It is not unusual to have the patient desiring a reducing

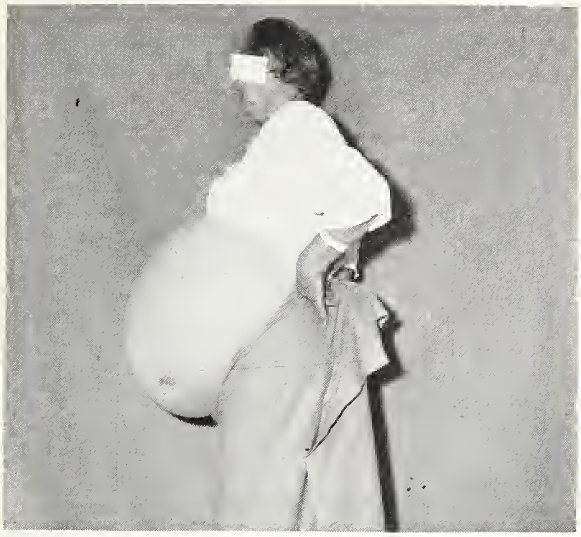

Fig. 1

program, with no symptoms other than an increase in abdominal size (fig. 1). Pain is not usually a predominant symptom. However, distention of the capsule, due to rapid growth, malignancy or hemorrhage into the cyst, may engender varying degrees of discomfort. Infection, torsion of the pedicle and rupture of the cyst, may produce an acute, surgical abdomen. Menstrual irregularities are not a prominent feature of cystic ovarian tumors, but may be encountered with corpus luteum cysts (delayed menses), and polycystic ovaries (amenorrhea).

For purposes of discussion, a modified classification of cystic ovarian enlargements based on that of Ullery and Boutselis, is presented.[3]

- I. Physiologic.
    - A. Corpus luteum.
    - B. Mature follicle.
- II. Dysfunctional.
    - A. Follicle cysts.
    - B. Lutein cysts.
        - 1. Granulosa lutein cysts.
        - 2. Theca lutein cysts.
    - C. Polycystic ovaries.
- III. Neoplastic cysts (benign).
    - A. Pseudomucinous cystadenoma.
    - B. Serous cystadenoma.
- IV. Neoplastic cysts (malignant).
    - A. Pseudomucinous cystadenocarcinoma.
    - B. Serous cystadenocarcinoma.
- V. Teratoid.
    - A. Dermoid cysts.
- VI. Endometriosis.
- VII. Para-ovarian cysts.

The gross pathologic characteristics and salient clinical features of common ovarian cysts are presented. Endometriosis is omitted as ovarian endometriosis is but one facet in a more involved and usually a more widespread disease.

The corpus luteum is normally found in the secretory phase of the menstrual cycle. This cyst may measure up to 2 centimenters in diameter, in the non-pregnant state, and larger during pregnancy. It may be filled with a bloody or brownish fluid. On section the wall is found to contain a characteristic gray or yellow luteum zone.

The mature follicle measures up to 8 millimeters in diameter and when mature contains clear fluid. It may be found in conjunction with multiple small cystic structures, representing other degenerated or atretic follicles.

Dysfunctional follicular cysts arise from atretic follicles, rarely reach more than 5 centimeters in diameter and are filled with a straw-yellow fluid. The tendency is for rapid resorption, but rupture and torsion of a pedicle may occur.

Dysfunctional lutein cysts are caused by excessive hemorrhage or fluid formation during the early phase of corpus lutein formation. This presents as a 1 to 4 centimeter sized cystic enlargement of the surface of the ovary, which is reddish brown in color. Pelvic pain may be produced if hemorrhage is marked, and rupture may produce signs of intraperitoneal bleeding. The usual picture is one of delayed menses, followed by abnormal vaginal bleeding, producing signs and symptoms suggestive of an ectopic pregnancy.

Multiple lutein cysts (theca lutein) occur with hydatidiform mole, or chorion epithelioma, and will subside spontaneously following proper therapy of the primary lesion.

Polycystic ovaries (Stein-Leventhal syndrome) are bilateral cystic enlargements of the ovaries, with thickened capsules, found in conjunction with amenorrhea, sterility and masculinization. Therapy is somewhat controversial, but most authors recommend wedge resection of the ovaries, with puncture of the cysts.

Pseudomucinous cystadenomata are one of the most frequent neoplastic cysts of the ovaries. They may reach tremendous size, the largest reported as weighing 329 pounds. They tend to be multilocular, thin walled, with a whitish to bluish white appearance. The fluid varies from viscid and mucoid to thin and straw colored. It may be brownish in color, due to hemorrhage into the cyst. Papillary ingrowths are infrequent (5 to 10 per cent). Malignancy rate is 5 per cent.

Rupture of the cyst carries the danger of the development of pseudomyxoma peritonaei.

Serous cystadenomata may vary from small to huge tumors. Both internal and external papillary projections may be present and visceral adhesions may occur. They may be unilocular, but the larger ones are frequently multilocular. The fluid is usually thin and may be straw colored or blood stained. The incidence of malignant change is at least 25 per cent. Microscopic confirmation of malignancy may be difficult, although the lesion may demonstrate clinical malignant tendency. Bilateral involvement is present in 50 per cent of cases.

Pseudomucinous and serous cystadenocarcinoma may grossly resemble their benign counterparts, or appear obviously malignant, with peritoneal and hepatic metastases.

Dermoids may vary greatly in size, from 1 centimeter in diameter to large tumors. They are usually 5 to 15 centimeters in diameter and may be semisolid in consistency. They are bilateral in approximately 25 per cent of the cases. Gross diagnosis is easy, as on opening the cyst the contents are found to be sebaceous with a definite greasy texture. The inner surface frequently contains hair, and teeth may be found. The malignancy rate is 2 to 3 per cent, and may be either carcinoma or sarcoma. These tumors are frequently pedunculated and are particularly subject to torsion of the pedicle.

Paro-ovarian cysts are mentioned because they are usually indistinguishable from ovarian cysts on a clinical basis. They arise from Gartner's duct remnants between the leaves of the mesosalpinx, lying between the tube and ovary. Simply splitting the peritoneum usually allows enucleation of the cyst.

MANAGEMENT

Ideally, of course, all neoplastic and most of the obviously larger persistent dysfunctional ovarian cysts, should be removed surgically. Because accurate interpretation of many of these structures may be somewhat obscure and difficult, it is necessary to establish arbitrary rules for the handling of these problems.

Small Ovarian Cysts.—From the standpoint of size alone, probably all ovarian cysts of 10 centimeters diameter and over should be surgically excised. When confronted with smaller cystic ovarian enlargements, expectant treatment with repeated pelvic examinations, may reveal regression of the cyst, thereby strongly suggesting a physiologic or dysfunctional etiology. It may be categorically stated that small dysfunctional cysts, with the exception of polycystic ovaries, should not be subjected to surgical intervention unless torsion, rupture, hemorrhage or infection produce a clinical picture of surgical accident. Dysfunctional cysts tend to subside within a few weeks and rarely become more than 5 centimeters in diameter. Authorities are agreed that a period of six to eight weeks' observation is indicated before operative intervention is considered.

Repeated pelvic evalution is facilitated if the bladder and lower bowel are emptied prior to bimanual examination.

Occasionally one cannot distinguish, on the basis of history and physical findings, between an ovarian cyst and a tubal pregnancy. We believe that if the diagnosis of tubal pregnancy is seriously entertained, the issue should be decided as rapidly as possible by colpotomy or laparotomy.

Care must be taken to avoid the removal of corpus lutein cysts in early pregnancy, as abortion of the pregnancy may result. This may be averted by delaying surgical treatment of relatively small and uncomplicated cystic enlargements during the first trimester. If removal of the structure becomes necessary, however, because of rupture, bleeding or torsion, abortion may be averted by the use of progestational steroids during the first trimester of the pregnancy.

The diagnosis of dermoid cysts may be facilitated radiologically by the demonstration of well formed ectodermal elements, such as teeth and bone.

Large Ovarian Cysts.—Large ovarian cysts may sometimes be confused with ascites; however, with the former the cul-de-sac is usually empty, with the majority of the tumor lying above the pelvic brim. In the presence of a large amount of ascitic fluid, the cul-de-sac is usually firm and a fluid wave is easily transmittable from the abdomen to the cul-de-sac. X-ray examination of the abdomen may be useful in distinguishing ovarian cysts from ascites. In the former, retention of detail of the retroperitoneal structures and lack of evidence of fluid between the loops of bowel will be found. An upper gastrointestinal series will usually reveal gross displacement of the abdominal viscera by a cystic tumor (fig. 2).

It is our practice to obtain intravenous pyelograms prior to elective major gynecologic surgery.[4] Figures 3 and 4 demonstrate instances in which this procedure was most helpful. Demonstration of ureteral deviation may be helpful in protecting these structures during surgery. Figure 4 depicts hydronephrosis and hydroureter en-

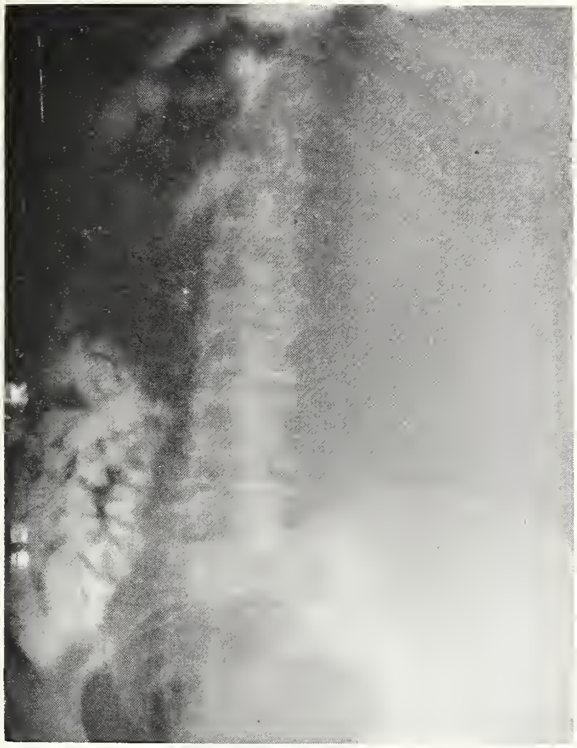

Fig. 2

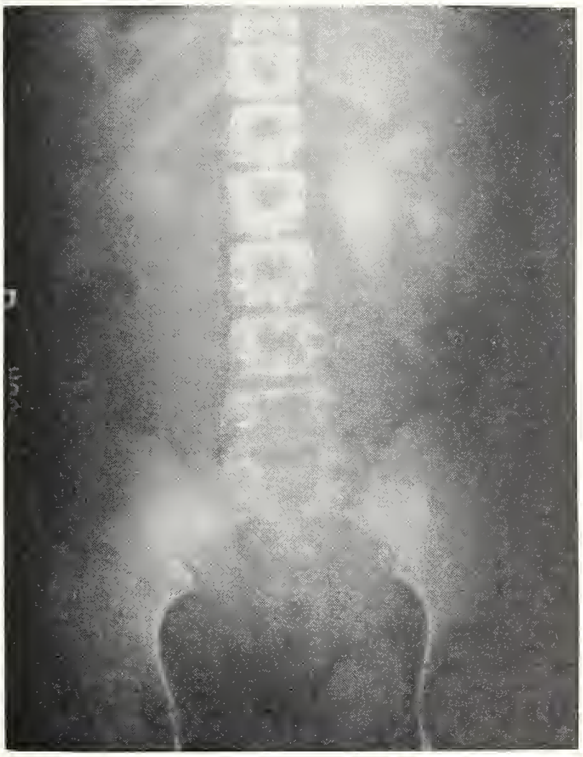

Fig. 3

gendered by the presence of a large ovarian cyst compressing the ureter at the pelvic brim.

The extent of surgery required will be influenced by the nature of the cyst and the age, parity and condition of the patient. If surgery is required for dysfunctional cysts because of rupture, torsion or bleeding, simple excision, preserving as much of the ovary as possible, is recommended. In the event of torsion of the pedicle, care should be taken to avoid untwisting the cyst prior to clamping the pedicle, in an effort to prevent thromboembolism. If removal of one ovary is contemplated, careful inspection and perhaps section of the contralateral ovary should be carried out to exclude bilateral involvement. This is an advisable procedure in dealing with most neoplastic cysts with known tendencies toward bilaterality. Frozen sections may be of some aid in the decision; however, one must bear in mind the difficulties in microscopic determination of some ovarian neoplasms, even with permanent sections. Certainly a papilliferous cyst with external growth, as encountered in serous cystadenomas, would best be treated by total hysterectomy and bilateral salpingo-oöphorectomy in a menopausal woman. Conversely, in a younger

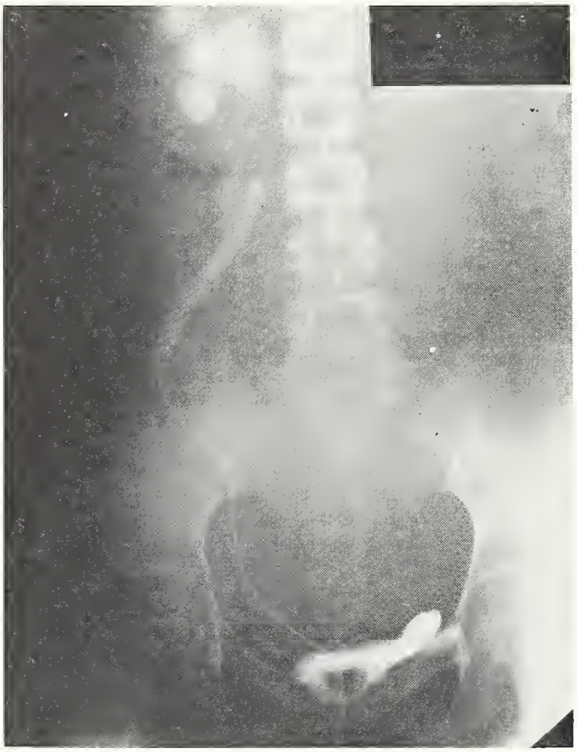

Fig. 4

(Continued on page 360)

ROBERT L. JACKSON, M.D., *and*
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The Outlook for the Young Diabetic Person

A regimen of therapy aimed at keeping the diabetic child free from glycosuria and insulin reactions is described and late research is presented.

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DIABETES MELLITUS in children and young adults during the pre-insulin era was a severe and rapidly progressive disease. After the discovery and introduction of insulin less than 40 years ago, it became possible to keep the diabetic child alive, and as additional information concerning the disease accumulated, better methods of treatment evolved. Advances in the field of nutrition, refinements in the handling of acute complications such as acidosis and coma, introduction of refined and prolonged-acting preparations, and the discovery of potent antibacterial agents with which to combat intercurrent infections, are all important factors which have combined to increase the life expectancy of the diabetic child.

As the survival period of juvenile diabetic children gradually lengthened, degenerative vascular changes were encountered with increasing frequency until today a high percentage of young adults who have been diabetic since childhood find themselves severely handicapped by crippling vascular disease. Although great progress has been made in the treatment of childhood diabetes, present day methods often have failed to prevent the development of chronic degenerative vascular changes which occur late in the course of the disease.

Our regimen of therapy[1] aims at keeping the diabetic child essentially free from glycosuria and insulin reactions. This is done by administering accurate doses of specific types of insulin in relationship to the intake of a complete diet adjusted to compensate for variations in physical activity. Although some clinicians have questioned the practicability of this regimen, in our hands it has met with considerable success. The most notable apparent effect of prolonged hyperglycemia is evidenced by the difference in response between patients who recently have become diabetic and those who have remained glycosuric for some time before good control is attempted. The latter patients have a much narrower zone of stability and are definitely more difficult to control than patients whose disease was well controlled soon after the onset of the disease. The use of more frequent small injections of insulin allows a greater degree of safety and produces a feeling of security on the part of

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OVARIAN ENLARGEMENTS—Continued

patient, a dermoid or a smooth, free, nonpapilliferous cyst might well be treated by unilateral adnexal excision.

If, however, sacrifice of both ovaries is necessary, there is little known rationale for leaving the uterus with its potentialities for neoplastic change and abnormal bleeding. Total hysterectomy should probably be performed in these instances.

SUMMARY AND CONCLUSIONS

The incidence of ovarian surgery is extremely high. Published studies suggest that many normal ovaries are inadvertently removed and suggest further that this may occur due to the failure of the surgeon to recognize the significance of physiologic or dysfunctional cystic enlargements. Difficulties in diagnosis may be encountered because of the extreme variations in the size of ovarian cysts.

A general plan of management is suggested.

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the mother that she can control the situation, especially during periods of infection. It is our impression that many physicians, dealing primarily with adult diabetic patients, tend to place too much emphasis on the desirability of reducing the number of injections of insulin. Parents' willingness to make some added effort in order to give their children every opportunity to conserve their health may be underestimated. Although our regimen may be somewhat difficult at first, the child and his parents learn a great deal about diabetes, and it is possible to simplify the program gradually. At present we are maintaining good control in our patients using only two injections of insulin each day.

There is almost universal agreement that the diet of the child with diabetes mellitus should be essentially the same as for normal children.[2] Controversy exists as to whether or not the diet should be given quantitatively and at specific periods during the day, or whether the child should simply be allowed to eat a supervised diet. All agree that insulin reactions are dangerous and must be avoided to prevent irreparable damage to the central nervous system.

The experienced clinician fully recognizes the importance of psychologic adjustment of the patient. Most recent studies show that diabetes enforces a way of life to which a child and his family will react according to pre-existing, yet nonspecific patterns. Diabetes seems to reinforce existing problems. To maintain control of his disease, the diabetic patient early in the course of his disease must establish habits of living which provide regularity in food intake, physical activity and rest, and avoid emotional crises. Consequently, the older the patient is when he develops his disease, the more difficult it is to change undesirable habits of living and maintain good control. Not only the child, but the family and the community, need to be educated if the patient is to make a good adjustment to his disease. To a great extent, the success we have had with our diabetic patients has resulted from an attempt to carry out such an educational program. The prognosis of the disease is much more dependent upon good environmental care of the child than on variation in severity of the disease.

Our studies of patients who have had their disease 15 or more years clearly show that the degree of control, as well as the duration of the disease, is an important factor influencing degenerative changes and that good control will prevent degenerative changes.[3]

Our present knowledge makes it not only possible but practical to maintain a high degree of control in children living in well-adjusted homes. Until more knowledge concerning the pathologic physiology of the disease is available, good control offers the best means of delaying or averting degenerative changes. It is dangerously easy to undertake the treatment of the diabetic child with insulin in such a way as to satisfy the child and his parents.

There is reason to hope that we may find more specific means of preventing these vascular degenerations. Lipid metabolism as well as carbohydrate metabolism is being emphasized in the study of diabetic patients because of the known relationship between altered lipid metabolism and atherosclerosis. We are undertaking further studies of the interrelationship of degree of diabetic control, level of serum lipids and vascular degeneration.

We are also carrying out studies aimed toward defining the abnormalities which characterize the prediabetic state, and finding methods of diagnosing prediabetes. We have been performing glucose tolerance tests on the siblings of diabetic children, and thus far two of these siblings, one of whom was an identical twin to a diabetic child,[4] have developed diabetes. Both of these children had abnormal glucose tolerance tests some time before the actual onset of diabetes. Several other siblings with abnormal glucose tolerance tests are under observation, but have not developed diabetes. As a part of this study we are performing the glucose tolerance test on normal children in order to obtain control values for its interpretation. It is hoped that detection of the prediabetic state will make it possible to find methods of treatment which will prevent the development of diabetes and its vascular complications.

Studies are also being carried out regarding the usefulness of the oral hypoglycemic agents in childhood diabetes. Our experience with tolbutamide and DBI has been disappointing up to now, but it is possible that both of these may have limited usefulness.

Recent advances in diabetic research have been encouraging. We are looking forward to the day we will know the cause of the disease and how to prevent it.

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A Program for Eye Tissue

Preservation and Banking

The establishment of donor eye tissue collecting, preservation and distribution at the University of Missouri Medical Center is described and a résumé of surgical methods of corneal grafting and vitreous implantation and transplantation is presented.

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During the last year, the University of Missouri with the volunteered sponsorship of the Missouri Lions Clubs has established facilities for eye tissue preservation and banking at the Medical Center teaching hospital. Known as the Lions Eye Tissue Bank of the University of Missouri, it has been operational since November 1960.

The rationale for the establishment of this eye tissue bank was that of providing an additional much needed laboratory and production unit for the preservation processing and distribution of eye tissue. Because of the very limited storage time permitted by fresh eye tissue, an unnecessary amount is lost through spoilage and through its inability to be conveniently shipped long distances or to relatively inaccessible communities. This factor also effects its lack of ready availability for emergency cases and restricts its use by qualified ophthalmologists not conveniently situated near a medical center or fresh tissue eye bank. As a result, most donor eye tissue is presently used for strictly elective operations with the patient held on stand-by call for immediate admission to the hospital if and when fresh material becomes available. This is the reverse of what the situation should more properly be, namely that of having the eye tissue in stand-by storage for immediate use if and when a patient should need it for either an emergency or elective procedure. That the present status of tissue preservation methodology and utilization has now made the satisfactory fulfillment of this requirement possible may be more adequately judged by a review of developments in this field.

I. Historical

A. *Corneal Grafting.*—Although there is some question as to precisely who first envisioned the clinical application of corneal transplantation, Reisinger, in Germany, as early as 1824 proposed the replacement of opaque human corneas with transparent cornea from animals. For this procedure, he coined the word "keratoplasty," a term used today for all types of corneal transplant surgery. Reisinger, however, limited his own surgical attempts in this field to experiments on rabbits, the results of which were only partially successful. His ideas were sufficiently revolutionary that they prompted one of his colleagues, Dieffenbach, in 1831, to point them out as the "most audacious fantasies, and it would be the highest reward of surgery if this operation succeeded." His reports, nevertheless, stimulated the interest of many ophthalmic surgeons, so much so that the medical faculty of Munich in 1830 offered a prize for work in keratoplasty. This provided the impetus for more experimentation and Bigger, in 1831, published the first successful reports of corneal grafting between animals of the same species. There followed much work down through the years, but it was not until 1906 that Zirm of Germany reported the first successful full-thickness corneal graft from one human to another. Although this proved that corneal homografting in humans was possible, no dependable source of donor tissue was available until Filatov, working at the Odessa Medical Institute in the early 1930's, demonstrated the usability of corneas obtained from cadavers.[1, 2]

B. *Vitreous Transplantation and Implantation.*—Vitreous humor, like so many other tissues in the body, lacks the ability to replace itself; thus, when vitreous is lost or destroyed through surgery, disease or accidental trauma, severe consequences may result. The most frequent complication from loss of vitreous is retinal detachment with subsequent loss of vision.

In 1890, Ford first reported on the beneficial effect of the withdrawal of cloudy vitreous and its replacement with aqueous from the anterior chamber. However, the procedure was beset with many problems and Deutschmann in 1909 reported his unsuccessful attempts at implantations of calf and rabbit vitreous into human eyes. In the intervening years until 1930, various ophthalmologists (Komoto, Elschnig and Zur Nedden), using Ford's technic, attempted vitreous replacement with various substances such as saline, air, aqueous fluid and cerebral spinal fluid. The big breakthrough came in 1946 when Norman L. Cutler first reported his successful replacement of cloudy human vitreous with whole fresh vitreous from human donors, and in 1957 Shafer reported the use of whole vitreous implants in more than 100 eyes without serious reaction or the loss of a single eye. In addition, Shafer noted that in 64 eyes with retinal detachment supplementarily treated with vitreous implantation, there was successful reattachment of the retina in 29 (45 per cent) of the cases. This prompted one ophthalmologist discussant to note that in retrospect it seemed strange that despite the fact that since 1889 vitreous has been recognized as the chief causative agent in retinal detachment, no one until now had effectively used it in retinal surgery. Today vitreous implants and transplants are acceptable surgical procedures unfortunately limited largely by the shortage of material available.[3, 4, 5, 6]

II. Transplantation Methods

A. *Cornea.*—There are two basic corneal grafting technics being utilized today. The full-thickness or penetrating graft requires removal of the host cornea through to the anterior chamber (fig. 1). In this procedure, the donor cornea must be fresh or if processed for preservation must retain the viability of its endothelial cells. Technically it is a difficult procedure and the postoperative course is a long and tedious one. This type of grafting is primarily used for deep corneal scarring and for mild or moderate keratoconus (conical cornea). Statistically, visual improvement is obtained in approximately 40 per cent of cases with lessened vision resulting in from 10 to 20 per cent of the cases thus operated upon.

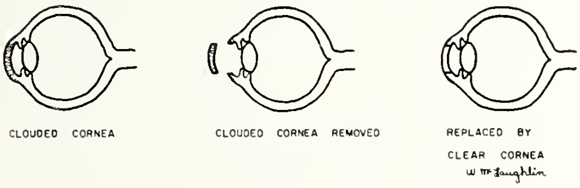

Fig. 1. Penetrating graft.

Split-thickness or lamellar grafting involves replacement of only the superficial layers of the cornea. The deeper layers of the cornea and Descemet's membrane are left intact in the host's eye (fig. 2). Donor corneal material for lamellar grafting has been found not to require viable endothelial cells; hence "processed" or preserved tissue may be used. Fortunately, lamellar corneal transplantation is surgically less difficult than the penetrating type and has a greater number and variety of indications for its use. Magitot has even expressed the opinion that lamellar grafting can be used in 75 per cent of the cases in which perforating keratoplasty is presently used.[7, 8]

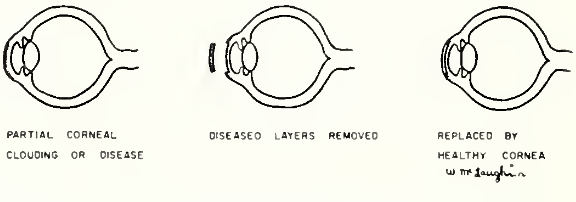
PARTIAL CORNEAL CLOUDING OR DISEASE
DISEASED LAYERS REMOVED
REPLACED BY HEALTHY CORNEA
W McLaughlin

Fig. 2. Lamellar graft.

B. *Vitreous.*—In patients' eyes in which the crystalline lens is still present, instillation of fresh or reconstituted donor vitreous is most generally accomplished by injecting it into the vitreous chamber by means of a syringe and needle via a small incision through the sclera in the region of the pars plana. When the host eye is without its lens, an alternate route may also be used by direct instillation into the vitreous chamber via the pupillary space.[6, 9]

III. Tissue Preservation

A. *Cornea.*—As in all human progress, attempts at scientific advances are not without their share of failures. However, through the many failures suffered in an effort to accomplish long-term preservation of donor corneal tissue several highly satisfactory methods have evolved.

1. Refrigerated Storage in Moist Chambers at 4 C: The simplest and presently most widely used technic is the storage of the entire eye in a sterile moist atmosphere at 4 C. The greatest advantage is that of simplicity. This is counterbalanced, however, by the fact that the tissue is usable only up to 72 hours. McPherson and

Stocker by tissue culture in vitro studies found that viability was no longer dependable after that length of time. This time element, therefore, limits the effectiveness of an exclusively "fresh tissue" eye bank by causing it to function largely as a collecting and shipping station. It is apparent that "spoilage" and thus loss of material can frequently result from delays of even a few hours in the transmission of the eyes from donor to host or by failures in maintaining continuously sustained optimum refrigeration temperature for the material. Nevertheless, this method of short-term preservation met the needs of the country fairly well for many years because of the relatively few men qualified to perform corneal transplantation surgery and because of the relatively limited variety of uses then made of donor corneal tissue.[10, 11, 12]

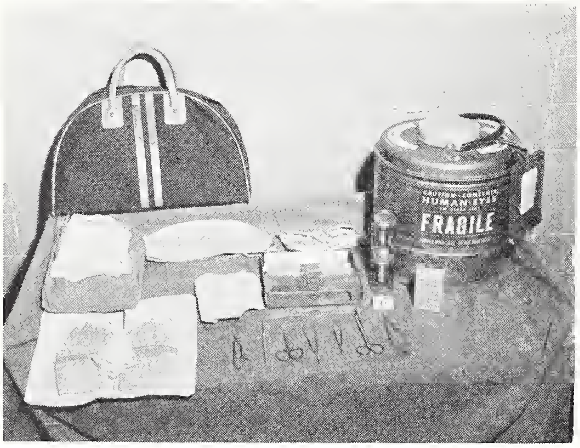

Fig. 3. Enucleation kit and transporting containers.

2. Room Temperature Storage in Glycerol With High Vacuum Dehydration: King, in the United States, has developed a highly successful method of ultra long-term corneal tissue preservation. Of great importance is the fact that storage is effected without refrigeration, thus enabling the material to be stocked at room temperature. The technic involves immersion of the donor corneal tissue along with a rim of adjacent sclera in 95 per cent commercial glycerin and subjecting it to high vacuum dehydration without precooling. The specimen containing tube is then sealed so as to retain the high vacuum and is ready for shipment via the mails and for virtually indefinite non-refrigerated storage. In more than 50 patients on whom lamellar corneal homografts were performed using material processed by this technic and stored at room temperature for periods varying from two months to two years, King has reported clinical results equal to those obtainable with fresh donor tissue. Full-thickness or penetrating grafts were not successful with this tissue because of apparent loss of viability of the donor endothelial cells.[8, 12]

B. *Vitreous*—The problems of long-term preservation of vitreous have been satisfactorily resolved with considerably less difficulty than that encountered with corneal tissue. The methods currently preferred are refrigerated storage of whole vitreous at 5 C or, more desirably, room temperature storage of lyophilized whole vitreous. Vitreous, fortunately, has been found to have the peculiar characteristic of apparent auto-sterilization which enables whole vitreous to maintain sterility in sealed tubes at 5 C storage for long periods of time. In the case of lyophilized vitreous, it is stored as a dry powder and is reconstituted at the time of use by the addition of sterile distilled water.[6, 9]

IV. Comments

Currently, an increasing number of ophthalmologists are being trained in transplantation technic and are practicing not only in major medical centers but in the less urban areas. To allow them to function effectively, donor material should be more readily available to them in their own communities.

To facilitate this development, the Lions Eye Tissue Bank of the University of Missouri is organized to further the collection, preservation and distribution of donor material. In addition to being equipped as a tissue processing center, the bank stands ready to cooperate with any of the many eye banks already in existence, and has inaugurated a program to encourage the establishment of much needed additional eye banking facilities wherever practicable throughout Missouri. This support is believed essential to the medical well being of the state because it is only through such widespread cooperative efforts that donor eyes can be obtained in sufficient supply to fill the increasing need for them. This need for readily available and usable eye tissue exists in every community where a qualified ophthalmic surgeon and adequate hospital facilities exist. In keeping with this principle, the Lions Eye Tissue Bank program of eye donor recruitment is being conducted with a view to benefiting all banks throughout this state. Its Eye Donor Registration cards have been made to specify that upon death of the registrant the eyes are to be donated to the "nearest eye bank or to the Lions Eye Tissue Bank of the University of Missouri."

Eye enucleation kits, transporting containers (fig. 3) as well as permit and record forms are being furnished by the local Lions Clubs to the affiliated fresh eye tissue collecting banks established as a part of this project. After each use, the enucleation kit is sent to the University of Missouri Medical Center in Columbia along with the thermos shipping container and completed record forms. A newly packed and sterilized kit plus a replacement thermos is then returned to the contributing affiliated bank by return carrier. Indicative of the widespread cooperation encountered in this program is the fact that the Missouri State Highway Patrol has volunteered transportation for the fresh donor eyes by relay via their usual patrol routes from any area of the state where other shipping facilities are inadequate.

At the present time, two such recently inaugurated affiliated banks are operational. One is at Boone County Hospital in Columbia and the other is at Kansas City General Hospital in Kansas City, Missouri. Together, these banks have already constituted a good source of material for both local utilization and for redistribution. The eyes thus collected have been used as fresh material or have been processed for storage as preserved tissue.

During the coming year, it is hoped that additional affiliated donor eye collecting and banking facilities can be established in appropriate areas. If they are, their success will depend in large part upon the interest and professional support given them by the physicians of Missouri.

V. SUMMARY

The rationale for the establishment of a donor eye tissue collecting, preservation and distribution program at the University of Missouri Medical Center has been outlined.

A brief historical review and a résumé of surgical methods of corneal grafting and vitreous implantation and transplantation were presented. The recent development of long-term donor tissue preservation and the inauguration of a multibank system for fresh eye tissue collection were offered as the practical approach to supplying the increasing utilization and demand for readily available and usable donor material.

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Quantitated Urine Cultures

THE CLINICAL concept of pyelonephritis has been extended to include a spectrum of states.[1, 2, 3, 4] On one extreme are individuals with acute febrile illnesses, flank pain, pyuria and bacteriuria. At the other extreme are the cases of chronic pyelonephritis which may result in bilaterally contracted kidneys, uremia and, perhaps arterial hypertension. Hence much effort has been directed toward the recognition of persons with chronic or occult urinary infection.

Because of the difficulty in establishing the diagnosis of urinary tract infection in the relatively asymptomatic individual, a variety of special technics has been employed.[5, 6] The present study reports the use of one such technic, the quantitated culture of urine. The approach has been applied by others for the diagnosis of disease states and for investigation of the healthy population.[7, 8, 9] The implications of these investigations are that minimal concentrations of bacteria may appear in the urine of normal individuals, derived presumably from vagina, urethra, prostate, and that such individuals do not have a urinary tract infection.[10, 11, 12] Further, they have stressed that, in general, patients who have a clinically demonstrable urinary tract infection, whether symptomatic or not, will usually have high concentrations of bacteria in their urine.

The technic of quantitated urine cultures has proved a useful research tool. Because of its simplicity, there seemed no reason it should not be a welcome approach to routine bacteriologic examination of urine in the context of clinical practice. This report is an evaluation of the technic based on 476 quantitated cultures from 100 patients.

METHODS

The urine cultures reported were performed on specimens submitted through routine channels by the physicians responsible for the clinical management of the patients. Such specimens were collected in sterile glass containers. From each specimen, urine was withdrawn in sterile pipettes in 0.1 ml. aliquots for inoculation of MacConkey's agar, blood agar and thioglycollate broth. Another blood agar plate was uniformly inoculated with 0.3 ml. of urine and was used for direct sensitivity testing with commercial filter paper discs impregnated with various antibiotics. In addition 0.1 ml. of urine was placed in a sterile petri dish and mixed with melted trypticase agar. After solidification and incubation the bacterial colonies in this "pour plate" were counted. Thus, concentrations of organisms as great as 10^5/ml. in the urine specimen were measured. In selected cases additional pour plates were made with urine diluted one hundred or one thousand fold.

The cases presented include each of the last 100 patients from whom three or more urine cultures were obtained. In all cases the patients were seen or their charts reviewed in order to establish if a urinary tract infection was present at the time bacteriologic cultures were obtained. A patient was classified as having pyelonephritis only if he had obvious symptomatology or if the radiographic interpretation unequivocally supported the diagnosis. The diagnosis of cystitis was made only if the patient was free of known urethritis and prostatitis and yet displayed dysuria and pyuria and if these problems were eliminated or alleviated by treatment with antibiotics. It will be noted that all the patients in these groups had symptomatic urinary tract infections.

In addition, bacteriologic data were available for many patients who did not have symptoms of urinary infection. As a means of bringing to light all factors which may tend to explain or give meaning to the bacteriologic data, various clinical factors were considered. The factors included

It is pointed out that much effort has been directed toward the recognition of persons with chronic or occult urinary infection. In a study multiple quantitated cultures were performed on urine received for routine culture on 100 patients. The results of this study are presented.

This study was supported in part by U. S. Public Health Grant E-3679.

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anatomic defects of the genitourinary tract, recent catheterization of the bladder, diabetes mellitus, chronic glomerulonephritis and arterial hypertension.

RESULTS

One hundred patients were studied with a total of 476 urine cultures. All had three or more cultures and the average was 4.76. The patients varied in age from 2 months to 87 years; their average age was 47.2 years. Cultures from the urine yielded growth of microorganisms in 363 instances; 24 per cent of the cultures yielded no growth. Table 1 presents the species and incidence of the bacteria recovered and contrasts these findings with those from a series of patients studied by Keefer.[11] In both cases E. coli and staphylococci represent the most common organisms encountered. Of the 363 isolations reported 68 per cent were gram negative bacilli and 32 per cent were gram positive cocci. This is in general agreement with the findings of others, although Keefer had a larger percentage of E. coli and this series a larger percentage of staphylococci. Proteus bacilli are unusually prominent in the present series. Nonetheless, the Proteus species recovered are, as usual, predominantly Proteus mirabilis (69 per cent). Others included P. vulgaris, 19 per cent; P. morganii, 11 per cent, and P. rettgeri, 1 per cent.

TABLE 1

BACTERIA RECOVERED FROM URINE CULTURES

	*Present Study**	*Keefer***
E. coli	25%	50%
A. aerogenes	9	13
Other coliform	5	—
Paracolobactrum	3	—
Proteus	19	7
Pseudomonas	7	15
Staphylococci	21	12
Strep. fecalis	9	2
Other cocci	2	—
Total Per Cent	100	99

* 363 of 476 yielded growth.
** Calculated from C. S. Keefer (11).

In table 2 the cases are divided into three groups according to the highest concentration of bacteria in any one urine sample. Those whose urine yielded no growth on all occasions are included in the group with less than one thousand bacteria per milliliter (20 cases). The second group includes intermediate concentrations from one thousand to less than ten thousand per milliliter of urine (48 cases). The third group had ten thousand or more bacteria per milliliter of urine (32 cases). Within the three groups, the patients are subdivided according to their clinical findings.

Symptoms of urinary infection were present in 50 cases. This symptomatic group included 24 patients with pyelonephritis and 26 with cystitis. More than half of the patients with symptomatic urinary infections had heavy bacteriuria with more than 10^5 bacteria/ml. of urine. Almost half had urine containing more than one thousand bacteria per milliliter. Notable was the one patient with symptomatic pyelonephritis whose urine contained fewer than 10^3 bacteria/ml. This 28 year old girl had cultures of three specimens of bladder urine. Two were sterile. The third contained Staphylococcus epidermidis, 80/ml. The case has been classified as pyelonephritis because of repeated episodes of flank pain, fever and pyuria. One episode preceded the first of the cultures by five days. During this period the patient treated herself with tetracycline.

TABLE 2

MULTIPLE QUANTITATED CULTURES OF URINE FROM 100 PATIENTS

	Number of Bacteria Per ml. Urine			*Number of Cases*
	$<10^3$	$>10^3 <10^5$	$>10^5$	
I SYMPTOMATIC URINARY INFECTIONS				
Pyelonephritis	1	10	13	24
Cystitis	0	13	13	26
II ASYMPTOMATIC PATIENTS				
A. Anatomic Defects	13	6	1	20
B. Recent Catheterization	1	2	2	5
C. Diabetes Mellitus	1	4	1	6
D. Chronic Glomerulonephritis	2	3	1	6
E. No Explanation	2	10	1	13
Total	20	48	32	100

The second group in table 2 is made up of the 50 patients without symptoms of cystitis or pyelonephritis. These 50 cases are further divided into clinical entities which may pre-dispose to bacteriuria and urinary tract infection. The clinical entities include: (A) anatomic defects of the urinary tract, (B) recent catheterization, (C) diabetes mellitus, (D) chronic glomerulonephritis. Some cases are in class E, no explanation. Cases were considered sequentially for these categories, so that if a case fell into class A (anatomic defects) it was not considered for any lower class even though diabetes mellitus (class C) or glomerulonephritis (class D) may have coexisted.

Class A: Anatomic Defects of the Urinary Tract (20 Cases).—The defects included strictured or deformed ureters, presence of urinary calculi, atonic bladder, nephroptosis or loss of perineal support with cystocele or urethrocele of at least moderate degree. Of the 20 persons with anatomic defects one person had more than 10^5 bacteria/ml. of urine. She was a 52 year old white woman whose presenting complaint was unrelated to the urinary tract. She was troubled by eructation after fatty meals. Bacteriuria was discovered during the general diagnostic examination. On three occasions during a four month period her urine contained more than 10^5 Pseudomonas bacilli per ml. of urine. Pyelographic studies revealed marked downward displacement of the left kidney by an abdominal mass. Removal of the mass (a "pseudocyst" of the pancreas) eliminated the pyuria and bacteriuria.

Class B: Recently Catheterized. Five Patients.—Two had greater than 10^5 bacteria/ml. The first, a 60 year old man, had extensive skin burns. Use of an indwelling catheter was associated with repeated recovery of P. mirabilis from his urine, at first unaccompanied by pyuria. Bacteriuria was unaltered by antibiotics but disappeared after removal of the catheter. The second patient in this group was a 75 year old man with the nephrotic syndrome of unknown etiology. Urine obtained at the time of initial catheterization was sterile and leukocytes were absent from the urine. Urine was obtained by subsequent catheterization and yielded E. coli and A. aerogenes in mixed culture, 10^3 to 10^4/ml. Pyuria later appeared. Treatment with steroids did not alter the nephrotic syndrome. Antibiotic therapy eliminated the two gram negative bacilli from the urine, but subsequent repeated cultures of voided urine disclosed a mixed culture of P. mirabilis and Streptococcus fecalis, 10^5/ml. At no time did the patient have overt pyelonephritis or symptoms of bladder infection. This case is presented because it typifies the problem encountered in evaluating many of the patients listed on table 2 in the asymptomatic group. Often there seemed a real likelihood of urinary tract infection. Yet in the asymptomatic group the diagnosis of infection could not be made with any real certainty.

Class C: Diabetes Mellitus, Class D: Chronic Glomerulonephritis.—In each category a single patient is listed who had 10^5 bacteria per ml. As in the cases discussed under catheterization, bacteriuria was persistent, pyuria intermittent and the patients without complaints relating to the urinary tract.

Class E: No Explanation.—This category includes the cases in whom there was no reason to suspect a urinary infection and who were free of known predisposing factors. Only one patient had more than 10^5 bacteria per ml. This case remains a puzzle. The man was 55 years old. On five occasions bladder urine contained A. aerogenes, 10^5/ml. Two subsequent specimens collected by bladder catheterization yielded the same species in the same concentration. The patient consistently had pyuria and at no time had symptoms of urinary tract infection. Intravenous and retrograde pyelograms were considered normal. He is being treated for multiple peripheral arterial occlusions. Repeated blood cultures and examinations of the chest have been unrewarding. An occult urinary tract infection may exist in this man.

Discussion

Of the 100 patients studied, 48 were judged to have some type of urinary infection. Twenty-four, in fact, had pyelonephritis. The high yield of infected cases is probably related to the fact that all the cultures were requested by the physicians rather than having been elicited for research purposes. Doubtless another factor is the selection of cases with three or more cultures.

If routine quantitated urine cultures have value, it must stem primarily from their ability to confirm or support the clinical diagnosis of urinary infection. An additional merit might arise from their elevating one's suspicion of occult infection and in leading to further investigational or diagnostic measures. With some reservations, it appears quantitated cultures can contribute positively in both areas.

Of the 32 cases with greater than 10^5 bacteria per ml., 26 had infections and had symptoms of infection. An additional patient with nephroptosis and two patients with recent catheterizations may well have been infected but were asymptomatic. Whether infection exists in the patient with heavy bacteriuria and diabetes mellitus and in the patient with heavy bacteriuria and chronic glomerulonephritis one can only question. Reasonable suspicion of infection, therefore, may be said to exist in the cases of at least 29 out of 32 individuals with heavy bacteriuria. Yet heavy bacteriuria in this series in at least one case did not correspond with a recognizable urinary infection. This case was noted earlier. Multiple isolations of A. aerogenes failed to lead to a diagnosis of urinary infection. The case was classified as "no explanation."

Looking at the converse, did repeated urine specimens with fewer than 10^3 bacteria per ml. occur in individuals free of urinary infection? With one exception, this was true. The excepted case was one of clear-cut pyelonephritis which had been treated with an antibiotic. In general, if a patient's urine contains antibiotic drugs, the absence of growth in the urine culture, no matter how the bacteriologic culture is made, probably cannot exclude the presence of urinary tract infection.

In many respects the most interesting, as well as confusing group of patients were those with concentrations of bacteria between one thousand and ten thousand per milliliter. Bacteriuria in this group meant urinary tract infection in some cases, suspicion of infection in others and apparent freedom from infection in the remainder. Suspicion of infection was based largely on repeated recovery of the same species of bacterium, occasionally accompanied by pyuria. Prospective studies on such patients may be of great help in interpreting intermediate grade bacteriuria.

A factor should be mentioned which affects the accuracy of quantitated bacteriologic cultures. This is the delay involved in transporting urine specimens to be cultured. It is unlikely that the usual infecting organisms found in urine would decrease in frequency or be inactivated by the delay, excepting the rare beta hemolytic streptococci. More likely is the duplication of bacteria within the bottle of urine. Taking, for example, a generation time of 20 minutes for E. coli it is conceivable that a delay of one hour could mean an eight-fold increase in the bacterial population of the specimen if the specimen were to remain at 37 C. This artifactual increase in population density may explain some of the cases presented here in which more than one thousand bacteria per milliliter were present without apparent infection. In this series, the technic seems to have achieved a useful stature in spite of this difficulty.

Based on experiments in dogs, it seems likely that bacteria may also duplicate within the bladder lumen.[13] Thus individuals with elevated residual volumes may have true infections or may yield urine with artifactually increased bacterial concentrations. No effort has been made to evaluate this phenomenon in this group of cases presented. It would seem that even artifactually elevated bacterial counts on the basis of obstruction to flow might provide a useful clue to urinary tract disease.

SUMMARY

Multiple quantitated cultures were performed on urine received for routine culture. One hundred patients were studied. In all but one case, bacteriuria of less than one thousand organisms per milliliter meant freedom from urinary tract infection. Of the 32 individuals with more than ten thousand bacteria per milliliter of urine, 26 surely had infections and three were probably infected. Intermediate grades of bacteriuria (10^3 to 10^5/ml.) were regarded as suspicious of infection. The technic of quantitated urine cultures seemed wholly suitable for routine application.

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The Newest Penicillins

In 1959 two reports,[1, 2] from the Beecham Research Laboratories, Surrey, England, were issued which forecasted a major breakthrough in the chemotherapy of staphylococcal disease. Research investigators isolated from a fermentation process by *Penicillium chrysogenum,* 6 aminopenicillanic acid, the structural skeleton of penicillin. This discovery made it possible to combine biosynthesis with chemosynthesis to produce an unlimited number of variations in penicillin.[3] Among the earliest of these synthetic penicillins was alphaphenoxyethyl penicillin (Syncillin, Bristol Laboratories), (Darcil, Wyeth Laboratories), (Maxipen, Pfizer Laboratories). This penicillin has some advantages over natural penicillins such as penicillins G and V but, in general, these advantages are in chemical and physical properties rather than antimicrobial properties.[4]

In 1959 there were discoveries that made it possible to produce a number of variations in penicillin. The chemistry and pharmacology, antimicrobial activity, penicillinase and clinical studies and side effects are discussed.

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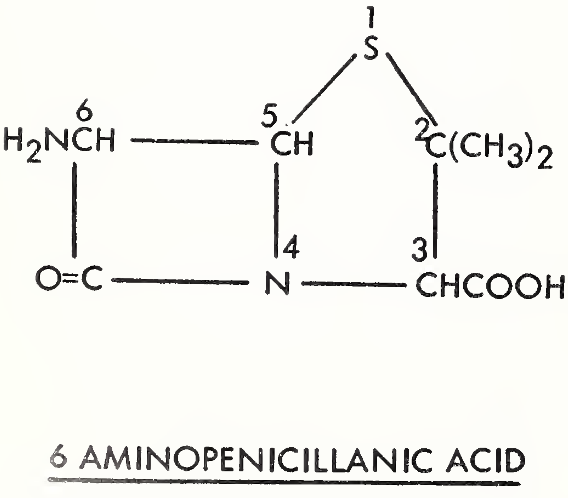
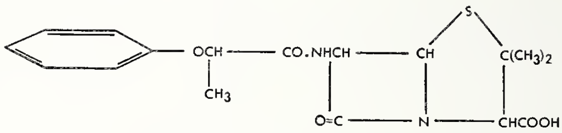
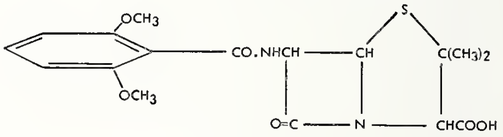


6 AMINOPENICILLANIC ACID

Fig. 1



ALPHA - PHENOXYETHYL PENICILLIN



DIMETHOXYPHENYL PENICILLIN

Fig. 2

Nevertheless, this product indicated that 6 aminopenicillanic acid (fig. 1) provided the basic structural antibiotic framework upon which chemists could elaborate a variety of side chain substitutions of the 6 amino group, with the hope of overcoming the present limitations of natural penicillins.

The latest and most important outcome of this work to date has been the synthesis of penicillins that are not attacked by staphylococcal penicillinase. In addition, there is sufficient clinical evidence that these penicillins have most of the attributes of natural penicillins including low toxicity, rapid absorption, bactericidal activity and stability in the presence of serum.

The penicillinase resistant synthetic penicillin currently available to physicians in the United States is dimethoxyphenyl penicillin (Staphcillin, Bristol Laboratories). It is identical to dimethoxybenzamido penicillin (Celbenin, Beecham Laboratories, England) available to English physicians. This compound has the 6 aminopenicillanic acid nucleus as does alphaphenoxyethyl penicillin, but differs in the radical attached to this nucleus (fig. 2).

Clinical and laboratory studies evaluating dimethoxyphenyl penicillin have been reported in the last few months and from this data there emerges much promise for the treatment of staphylococcal disease.[5]

Chemistry and Pharmacology

The synthetic penicillin, dimethoxyphenyl penicillin, is a white crystalline solid soluble in water. In neutral solution 50 per cent of the activity is lost in five days at room temperature. However, it is unstable in acid, at pH 2. at 25 C, 50 per cent of the activity is lost in 20 minutes. Thus oral use of this drug is precluded. Investigations carried out in animals and humans showed that blood levels after intramuscular injections resembled those following that with penicillin G. Like penicillin G synthetic penicillin requires large doses before it will penetrate into the cerebrospinal fluid.

ANTIMICROBIAL ACTIVITY

This synthetic penicillin is active against pyogenic gram positive cocci including *beta-haemolytic Streptococci, Streptococcus viridans* and *Diplococcus pneumoniae.*

Most remarkably, however, it is effective against coagulase positive, penicillinase producing, staphylococci which are resistant to the natural penicillins. In one study,[6] 18 per cent of 1,118 strains of staphylococci isolated at a large hospital were sensitive to penicillin G, whereas all were sensitive to dimethoxyphenyl (dimethoxybenzamido) penicillin. In other *in vivo* investigations,[7] laboratory animals, infected with staphylococci resistant to penicillin G, were treated successfully by the use of this synthetic penicillin.

Minimum inhibiting concentration of this synthetic penicillin appears to be of the order of 2 mcg./ml. against the staphylococcus. This represents an activity about 1/100 of penicillin G. Therefore, high concentrations must be maintained in the blood by comparatively large doses since absorption and excretion rates of synthetic penicillin are essentially similar to that of penicillin G. A later look at clinical studies below pinpoints the necessary dosage levels.

PENICILLINASE

The outstanding characteristic of the newest penicillin is stability to staphylococcal penicillinase and subsequent usefullness against penicillin resistant staphylococci. In a series of studies[8, 9] it has been established that this synthetic penicillin induces formation of penicillinase but does not function as a substrate for this enzyme of the staphylococcus.

In line with this, further studies indicate that subtle differences between bacillus penicillinase and staphylococcal penicillinase may make it possible to utilize bacillus penicillinase for treatment of allergic reactions to penicillins. Some synthetic penicillins which may be completely resistant to staphylococcal penicillinase are partially susceptible to bacillus penicillinase.

It should be added here that there is no clear-cut evidence at this time that any difference exists between commercially available natural and synthetic penicillins with regard to hypersensitivity.

CLINICAL STUDIES

Four series of clinical studies on patients with staphylococcal disease of varying severity are particularly worthy of reporting.

Stewart *et al.*[10] treated 17 children with various forms of infection due to S. *aureus* using dimethoxyphenyl penicillin. Thirteen of the 17 infecting strains were resistant to natural penicillin. Results showed that there was elimination of the infecting organism in 14 of the 17 cases. Two of the unsuccessfully treated patients succumbed to factors unrelated to the staphylococcus and thus only one treatment failure with regard to the staphylococcus occurred in this group. These patients included two with septicemia, two with pneumonia, five with recurrent boils or skin infections, and the remainder with less severe diseases such as soft tissue abscess or throat infections.

In a study to evaluate dosage level,[11] 15 subjects were given varying dosages of synthetic penicillin and blood serum levels were observed. The results of this investigation on absorption and excretion level showed that a dosage of 1 gram of the antibiotic each 4 to 6 hours was necessary for satisfactory therapeutic levels. This is the equivalent of 10 million units of penicillin G daily; however, the lower activity of this synthetic penicillin required this dosage. Correspondingly, children's dosage is recommended at 25 mg./kg. body weight.

Using similar dosage levels, Douthwaite and Trafford[12] treated 13 patients with severe staphylococcal infections in which it had been determined that the organism was resistant to natural penicillin and did not respond to treatment with other antibiotics. Of these patients six had pneumonia, two wound sepsis, one empyemia, one bronchiectasis, one urinary infection, one cerebral abscess and one spinal extradural abscess (treated locally by instillation).

In each patient the infection was eliminated, as proved by bacteriologic follow up. This confirmed the efficacy of the new penicillin preparation as well as the dosage schedule which was maintained at 1 gm. in 2 ml. sterile water given intramuscularly each four hours.

In another series of clinical cases in Seattle, Washington, Allen, Roberts and Kirby evaluated dimethoxyphenyl penicillin against penicillinase producing staphylococci causing osteomyelitis, pulmonary disease, empyema and soft tissue infections.[13] They concluded that this form of synthetic penicillin showed promise of being a safe and effective agent for the treatment of staphylococcal infections resistant to natural penicillins.

A summary of clinical and laboratory studies further describing successful experience with dimethoxyphenyl penicillin in the United States is available.[5]

Side Effects

The only consistent side effect with use of synthetic penicillins appears to be tenderness and pain at the site of injection, a finding equally applicable to injection with penicillin G.

Such toxic reactions as nausea, vomiting and general systemic ill effects have not occurred. Since some courses of treatment described in these clinical studies had lasted up to 30 days with follow-ups to eight months, it suggests that these drugs can be used with a good safety factor.

Conclusion

At the present moment an advance in chemotherapy is clearly at hand. It is not too remote to suppose that new synthetic penicillins may be produced which can offer a superior antimicrobial spectrum of activity as well as resistance to penicillinase. However, at the present time there is available defense against life-threatening staphylococcal disease. As has been inferred elsewhere[14] dimethoxyphenyl penicillin will probably be preferred to vancomycin or ristocetin because it is less toxic and easier to administer. It is less certain that it is superior to erythromycin and novobiocin, unless of course, resistance is present.

Optimism over the advent of a new and promising antibiotic has in the past all too frequently been diluted by the knowledge that unwise and irresponsible use of such armamentarium can create more harm than benefit. Once more, the physician is placed in the position where he can continue to promote a rational chemotherapy by basing therapeutic measures on sound clinical judgment supported by good laboratory practice.

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W. S. PLATNER, Ph.D., ***Columbia***

The Effect of Stress on the Aging Process

BODILY CHANGES in animals produced by advancing age have been described by Bortz[1] as similar to those undergoing Selye's "General Adaptation Syndrome." Howland[2] believes that the loss of ability to adapt is an indication of aging. The strain of daily existence and the decline in resistance to random stresses represents energy expenditure. Excessive expenditure of energy speeds up the aging process and invites premature deterioration.[3]

Since the aging process represents an expenditure of energy with a diminished reserve of this energy, added insults or stresses speed up the process of deterioration and result in loss of the adaptive resources.[1] For example, under the stress of surgical procedures older people sometimes are subject to rather marked hypotension.[2] This is now considered a principle sign of adrenal failure precipitated by surgical stress. Apparently, then, in some cases, the cortex of the adrenal glands, being subject to the fatigue of old age, makes the individual less able to maintain his internal environment.

Longevity of each family unit is set by genetics. Within this framework, the mortality rate of each age group is a function of the stresses encountered in daily living.[1] Before one can predict, with any accuracy, what the consequences of certain stresses will be on the older organism, more information of the normal physiology of the aging process will have to be uncovered. A number of physiologic and biochemical tests reveal no differences in stress reactions between normal youngsters and healthy old people.[1] Certainly infections and antigenic stimuli in mature adults show a superior response than do the very young. Bortz points out that mortality rates from vascular insults and surgical procedure are approximately similar for good risk patients regardless of age.

Before comparing the reactions to stress of the old with the young, one may ask what are some of the fundamental bodily changes in the aging process? Certain organ systems are more vulnerable than others. The functions not affected by age, as studied by Shock[4] on humans, are blood volume, glucose content of arterial blood under fasting conditions and the acid-base equilibrium of blood. A function that does change with age is plasma flow through the kidneys (this does not, however, result in renal impairment or elevation in blood urea nitrogen). In the glucose tolerance tests after administration of 50 grams of glucose, Shock found that sugar disappeared more readily in younger men. Insulin augments the disappearance of glucose in all age groups but at a greater rate in young than in old men.

Renal studies including Tm Diodrast, maximum excretory capacity, and ability of the kidneys to reabsorb glucose, indicate a decrease in function with age at about the same rate, that is 6 per cent per decade.[10] Apparently, about 6 per cent of the kidney present at the beginning of each decade has been lost during the following 10 year life span. This then, indicates that the older organism is less able to utilize glucose as a source of energy when the stresses of the environment make their demands upon the body. One might also predict that toxic substances of the body may be present longer to injure tissues and upset the homeostasis of the organism due to the previously mentioned decrease in kidney function with age.

Various phases of the effect of stress in the aging process and the work that has been done experimentally are discussed, as well as some questions raised.

Dr. Platner is Professor of Physiology at the University of Missouri School of Medicine.

The following are questions one asks oneself as to why the aged organism is less able to adapt to the stresses of daily life: Is this loss in adaptability due to the loss of function of the cell because of its intrinsic susceptibility to age? Is the loss due to a decreased blood supply? Is the organism weakened due to hormonal depletion? Probably all of these mechanisms are involved, but research has yet to indicate which question is the most fundamental one.

In noting the decline of muscle strength and physical performance in man with age, Simonson[5] indicates that the endocrine system seems to be involved. He found that the oral administration of methyl testosterone over a period of several weeks or months, in six men over 50 years of age, resulted in a significant increase in weight lifting ability, in weight holding ability and muscle strength. (This treatment had no effect on four normal young men.)

Simonson also found that the endurance of 11 older men with an average age of 53 was only about one half that of 25 younger men with an average age of 33.3 years. With this lower performance the fusion frequency of flicker, which is related to the excitability of the central nervous system, was more depressed by exercise in the older men. This suggests that the pronounced drop of endurance with age might be partly caused by a decreased tolerance of the central nervous system (which would actually protect the individual from overexerting himself).

The decreased endurance of older individuals is no surprise, particularly when it is noted in the literature that older people go into oxygen debt more readily due to a decreased cardiac reserve and a general decreased cardiac stroke volume with vital capacity also decreased.[5]

On the optimistic side, Simonson points out that training will counteract the effect of age on physical fitness. Few untrained younger men will match the performance of training older men. A trained man of 60 will run faster than an untrained man of 40. Response to training is another question. Experimental information on this fundamental question is still missing.

The decrease in flicker fusion correlates well with a decreased cerebral circulation in age.[5]

Durnin and Mikulicic[6] studied the effects of the stress of graded exercises on the energy expenditure and heart rates of young and elderly men. These authors investigated two groups of men (one age group 20 to 30 years and the other 55 to 65 years of age). All of the men were day laborers. Energy expenditure and heart rate were recorded during exercise and heart rate followed during the first 10 minutes of recovery. There was no significant difference between young and old for energy expenditures of the more moderate exercises (arm exercise), but in the more severe treadmill exercises the old expended significantly more energy than the young. The behavior of the pulse followed the same patterns. One may tentatively conclude that due to poorer muscular coordination, the older person is less efficient in performing physical tasks.

Of primary importance in evaluating the influence of age on the stress phenomena is a consideration of what is traditionally called the pituitary-adrenal axis. Grad and Kral[7] have recently studied the effect of senescence on resistance to stress by subjecting young and old mice to cold. The experimental animals used in this study were inbred female mice. The young group was 4 to 7 months old and the older group was 16.5 to 21 months old. These authors found that the mortality rate was significantly higher in old mice upon exposure to cold than in the young. There were two crucial temperatures at which this significant difference was noted, at 6 to 7 degrees centigrade and 9 to 11 degrees centigrade. However, for unadapted mice at 2 to 4 degrees centigrade and 15 to 17 degrees centigrade, age difference in mortality did not occur. It was found that the temperature which produced 50 per cent mortality among each group was 4 to 5 degrees centigrade for the young and 9 to 10 degrees centigrade for the older mice. It was discovered that the older mice could adapt to their cold environment. One hundred per cent died on the first day of exposure to 2 to 4 degrees centigrade. No deaths were noted among the old group on the first day when they were gradually adapted to the cold environment. However, their homeostatic temperature mechanism must have been deficient, because at the end of seven days eight of the 12 cold adapted old mice died at a temperature range of from 1.5 to 3.5 degrees centigrade. In contrast all of the 19 cold adapted young mice were still alive after seven days under the same conditions.

As a result of exposure to cold, oxygen consumption, food intake and blood sugar increased in both age groups but significantly more in the young than in the old. The increased food intake was not sufficient to prevent body weight loss in either group. The old mice lost more weight than did the young. Thus the metabolic deficit was more in the old than in the young.

In studying the blood picture, the total leukocyte count and circulating lymphocyte and eosinophil counts decreased in both age groups during exposure to cold. The number of polymorphonuclear cells increased. In the mouse, in contrast to man, the leukocytes consist mostly of lymphocytes. The total decrease of leukocytes was due to the lymphocytopenia. Eosinopenia and lymphocytopenia consistently occur during stress due to the increased secretion of 11-adrenocorticoids.

The per cent decrease in circulating lymphocytes was significantly greater in the young. This may be due to a greater secretion of corticoids of the adrenal cortex in the young or a greater resistance of lymphocytes of the old mice due to destruction both in blood and lymphoid tissue and/or greater resistance to peripheral removal of lymphocytes.

There was no significant difference between the eosinopenia of both groups, possibly due to the maximal discharge of the steroids in both groups with the eosinophils being sensitive to such a rise in steroid concentration of the body.

Another interesting finding by Grad and Kral was in the red blood cell count between the two age groups. In the young the red blood cell count indicated the characteristic increase when the animals were subjected to the cold (the well known hemoconcentration). The red blood cell count of old mice actually decreased, indicating that hemoconcentration did not occur or it was obscured by a less active erythropoesis or a more active destruction of them.

During the warm up period, a reversal of several physiologic variables was observed. In both groups oxygen consumption and blood sugar decreased while body weight increased. It is apparent that anabolism is predominant. There was a greater weight gain among the young and food intake was higher also in the young.

Of the biological functions studied in this investigation, the decrease in eosinophils and lymphocytes, the increase in polymorphonuclear leukocytes, and the decrease in body weight (due to cortisone-like compounds) are all thought to be under control of the adrenal glands. The increased oxygen consumption may be due to an increased secretion of epinephrine from the adrenal medulla early in the cold environment and by thyroid hormones later on. The blood sugar increase can be produced by an increased output of adrenal medulloids as well as corticoids.

It is important to note that most of these changes have been brought about by stimulation of the hypothalamus. (This stimulation may be mediated via the pituitary and adrenal cortex via ACTH.) The increased food intake probably is due to hypothalamic activity.

It is generally believed that stress leads first to the stimulation of center(s) in the hypothalamus via humoral or neural pathways.[7] Thereupon impulses travel down the sympathetic nervous pathways stimulating the adrenal medulla to release epinephrine and/or arterenol, which besides having peripheral effects, also stimulates the anterior pituitary to increase its output of ACTH. In this way, the adrenal cortex is stimulated to increased secretion of corticoids which then act on target tissues exerting its anti-stress effects.

There are aspects of integrative action of the nervous system in adaptation to cold which are not mediated via the endocrines (increased food intake and possibly others). Whatever the mechanism of integration of these functions, it is not achieved as efficiently in old as in the young.

Fatal failure of old mice to adapt to cold generally occurred early in the stress period, that is, in the alarm phase of Selye's "Adaptation Syndrome." The old animals which survived the first two days of cold exposure had a good chance of surviving the other 12 days of stress. If the measurements of mice that died early in the experiment were included in the results, the differences between the age groups would probably be greater.[7]

A somewhat more critical approach to the problem of aging and implicitly its effect on the stress phenomena is proposed by Geiringer.[8] He feels that aging is a multicentric phenomena, acting on different tissues at different times in different ways and with different intensities. To arrive at a useful understanding of this complex maze of interactions the experimental approach must be analytical. The changes due to age must be studied tissue by tissue, organ by organ, and function by function. Now experimenters run into great difficulties of method. Just comparing young and old with regard to a stress on one organ system ignores the many intervening variables, such as the change in the general metabolic make-up of the old organism. No method of experimentation on the intact animal, which is at present practicable, can possibly provide an answer to this question. The previous studies simply do not indicate the mechanism of aging.[8]

When measuring a function in an aged animal, the correct control is thought to be a young animal. However, as Geiringer points out, age is not the only thing that varies between young and old organisms.

All these difficulties would be resolved if one could transplant old organs in young animals and then compare these individuals with their littermates. Geiringer did this with young rats. Their adrenals were replaced with adrenocortical transplants from older animals. The functions assessed were growth, water diuresis, uropepsin excretion and potassium tolerance. Adrenal homotransplantation is possible between Wistar albino rats of a highly inbred strain (Glaxo strain). This author had three groups including a normal group, those having transplants from their contemporaries and those having old transplants (229 to 373 days older than the host's). The rats in the latter two groups were adrenalectomized at age 40 days. At 147 days after the transplants, they were subjected to a water load test and at age 182 days, a test for potassium tolerance. The survivors were then killed and autopsied. Growth, reproduction, water diuresis, uropepsin excretion and potassium tolerance were studied during the ensuing 143 days. No differences were discovered between the animals that had adrenocortical transplants from their contemporaries and those animals with transplants from animals 280 days older. These negative results did not discourage the author, however. He points to the small number of animals used and also the failure to follow this study into old age of the host.

Continuing the study of the relationship of the hypophysis to the aging process and responsiveness to stress, Friedman, Hinke and Friedman[9] injected 1.5 per cent sodium chloride as an osmotic stimulus into the carotid artery of two groups of rats. One group contained young female rats less than 6 month old, the other, old female rats of not less than 20 months old. It was found that the neurohypophysis is less responsive in old animals than in the young in producing the release of antidiuretic material. This apparently was not due to renal impairment or diminished response to pitressin, although the authors did not include this data in their report.

In the presentation of this paper an attempt was made to be as limiting as possible as to the direct effects stress has on the aging phenomena. Certainly, underyling all of this is the normal physiology of the aging process which is as all incompassing as the field of physiology is itself. The work to date is still on a fundamental descriptive level. It is clear that no one is sure about the level at which aging can be studied most profitably. Some feel that the comparative approach in studying whole populations has been badly neglected, whereas others feel that the study of aging in separate organ systems or in individual cells might provide the important clues.[11] Perhaps the most intriguing and, as yet, unrewarding is the transplanting of old tissues in young hosts and thus creating better controls for experiments in the aging process. Shock[4] points out that physiologists have demonstrated a reduction in physiologic capacities and functions with increasing age. Anatomists have shown a reduction in the number of cells, particularly in the nervous system, and a decrease in size of the functioning parenchymal cells. To what extent can the physiologic impairments of old age and the organism's inability to meet the demands of stress be explained simply by a reduction in the amount of functioning protoplasm or number of functional cells remaining in the organism is a question of paramount importance today.[12]

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GWILYM S. LODWICK, M.D., ***Columbia***

Developments in Medical Education

A Special Article

The basic elements for a good educational program are described as superiority of student body, faculty and curriculum. These elements are discussed and the growth of these elements in the University of Missouri School of Medicine are outlined.

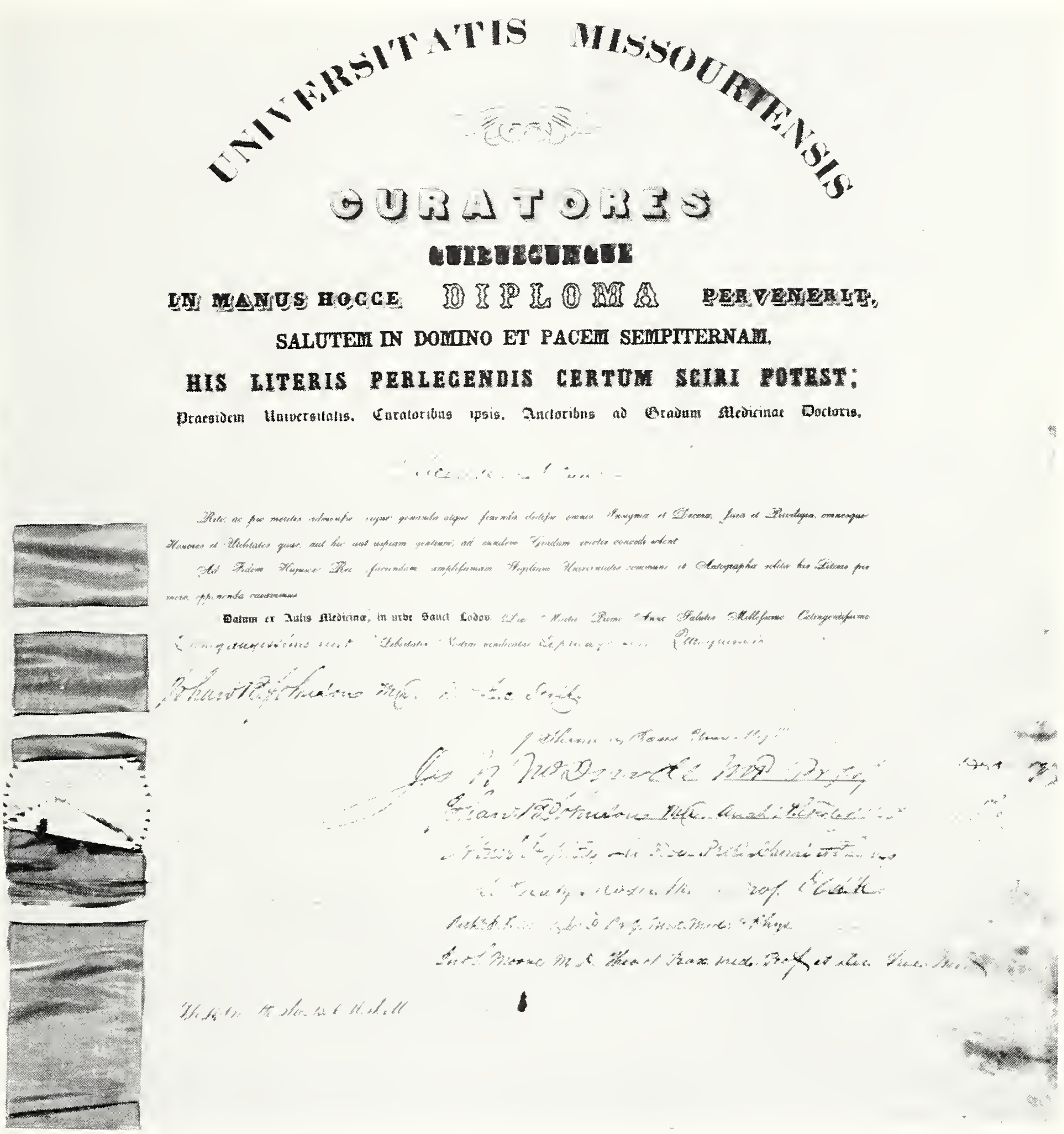
Dr. Lodwick is Associate Dean of the School of Medicine and Chairman of the Education Committee.

THE ESSENTIAL elements of a great educational program are superiority of student body, faculty and curriculum. Development of superior quality in each of these three areas is an evolutionary process, with success in attaining any one of these objectives being closely interrelated to the successful attainment of the others. The ultimate greatness of a program is probably more fundamentally dependent upon an outstanding student body and a brilliant faculty than upon a polished curriculum; but, in the sequence of attainment, the faculty and the curriculum must come first, and as they are recognized and appreciated, the superior student body ultimately will follow.

Because of vigorous competition between medical schools for select scholars, the curriculum has recently come under especially close scrutiny, with recognition of need for improvement. This recognition has brought about modification and often basic redesign of the curriculum, with the purpose of incorporating recently expanded disciplines, and of integrating more closely the teaching of subjects which are common to several disciplines; yet at the same time reducing the required course material to a hard core and providing more elective time for research and special courses which meet the special needs of the individual. These changes have often served to make these educational programs intellectually and emotionally more appealing to both faculty and students. The occasional school which has been successful in evolving a particularly well designed and widely publicized curriculum has reaped a rich reward of highly motivated scholarly applicants, and its admissions committee has found its task the pleasant one of selecting the brightest gems from a collection of rough jewels, in contrast to the more common task of endless sifting of candidates from the lower half of the list to determine which is least likely to succumb to the rigors of anatomy and biochemistry. This favorable trend has been especially true of schools not restricted geographically in their recruitment of students, but which have been able to draw their applicants from the entire nation. One result of this trend has been a rash of re-arranging of the curriculum in the hopes of improving the educational program and of attracting a more qualified student body, not always with the satisfying results that have been attained by the more successful few.

At the University of Missouri School of Medicine, where the four-year school was reopened in 1955, the faculty has inherited a long tradition of academic excellence and high standards. Organized in 1845 in St. Louis as the McDowell Medical College, and with degrees granted by the University of Missouri (fig. 1), the school has maintained a rigorous standard of performance which, in 1910, won warm approval by Flexner in his report at a time when medical education generally was at low ebb. In order to retain its high standards, the school had voluntarily reduced its curriculum from four to two years through elimination of the clinical years. Subsequently operated for nearly 50 years as a two year basic science course, the school retained a small, but select, student body, an excellent faculty and a well rounded, traditionally aligned curriculum. Graduates received the degree of Bachelor of Science in Medicine, and were accepted as transfer students into the finest schools of the nation.

To meet the growing demand for a state supported four year school of medicine and more practitioners for the State of Missouri, the school was expanded, and in 1953, assembly of the nucleus of the clinical faculty was initiated. This faculty has grown until there are now twelve academic departments, 90 full-time and 62 part-time teachers, in ranks ranging from full professor to instructor. The first year medical school class has been expanded from an original 40 students to 80, and the graduate program has been developed and expanded in both preclinical and clinical disciplines to the point at which more than 110 residents and graduate students will be enrolled in graduate studies during the coming academic year. The teaching hospital staff has grown to more than 750 full-time and 200 part-time employees, and on January 1, 1961, the full complement of 441 beds were made available to the clinical departments for teaching. The recruitment of a new faculty is a tremendous undertaking, and characteristic of most new schools, the growth and development of the University of Missouri faculty, staff and student body has been the cause of discouraging moments; notwithstanding, these problems have proved temporary, and the faculty, with a sense of discipline, mutual respect, a passion for teaching and stimulating its students, and a strong unity of purpose, is well on its way to becoming a great faculty.



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With these important objectives nearing realization, increasing attention is being focused upon the need to examine the content, relative proportion and timing of the courses within the curriculum.

As it now stands, the educational program consists of the basic science course, which has proved its worth in the two year school, and which is aligned in the pattern of medical education traditional of the last half century.

Superimposed upon these two years which include growth and development and the fundamentals of physical diagnosis are the clinical two years. The clinical curriculum has been designed to meet the requirements of contemporary medical education, but it has been limited in its scope by the firmly established pattern of the two basic science years. Layering of the basic science and clinical years into distinct strata with little cross reference for many years was traditional of medical education. Today, where this basic pattern has been retained, and where close teaching relationships are established between departments of the same year, to the point where disciplines merge, the pattern is spoken of as "horizontal integration," in contrast to the educational pattern known as "vertical integration," which inter-relates the basic sciences and the clinical experiences throughout the four years of the educational program. The students emerge from our program well educated and well trained in modern concepts of patient care, but in order to accomplish thorough coverage of vitally important material, the curriculum is almost devoid of free time and opportunity for elective study. Regardless of his special qualifications or special needs, each student follows the same inflexible program of courses from matriculation to graduation.

Recognizing that the present curriculum may be less than ideal, yet rejecting the thesis that because it is old, it is outmoded, the Committee on Education for more than a year has been intensively studying recent trends of medical education in the nation, and the special objectives of medical education in the State of Missouri, in the context of a state supported university in the center of a large rural area. The following trends have been of special interest to the Committee:

(1) In 1940, the percentage of medical school graduates who planned to enter general practice was 45 per cent. By 1950, this percentage had dropped to 31 per cent, and by 1958 to 21 per cent. The relative number of those planning to enter a specialty field seems nearly stabilized, while those planning to enter teaching and research combined with practice are increasing in number. Our findings indicate that graduates from the University of Missouri are following the national trend.

(2) The State of Missouri ranks 45th in the nation in the per capita number of its youth who enter the medical profession. Only one state in which there are institutions graduating medical practitioners ranks lower than Missouri.

(3) The premedical educational achievement of applicants to medical schools in the nation has fallen in the last ten years from 40 per cent A's and 43 per cent B's to 16 per cent A's and 70 per cent B's.

Currently, we are seeking ways of correcting for these local and national trends. We believe that the cost of the professional training for a career in medicine has been a discouraging influence on those who might otherwise be well qualified. To this end, the Missouri State Medical Association and other local and state medical societies during the last year have established loan funds for medical students at low interest rates. Congress is now considering scholarship support at the national level.

As a faculty, we intend to provide a medical educational program which is second to none, within the limits of our resources.

To meet our objectives, the Committee on Education has established the basic tenets that (1) the curriculum appropriate to our school must be consistent with the health needs of the State of Missouri, and (2) it must be designed around the strengths of our own faculty.

On November 9, 1960, to establish a guide for future planning, the Committee made the following report to the Executive Faculty of the School of Medicine:

Report of the Committee on Education to the Executive Faculty, November 9, 1960

Having considered current trends in medical practice and medical education, and the special needs for medical care in the State of Missouri, we believe that the desired image of our graduate should be a physician who has:

1. Acquired fundamental knowledge of the principles of medical science and practice and a thorough understanding of the relationships between basic sciences and clinical practice.
2. Developed an understanding of basic skills and techniques which physicians employ to improve the health of their patients.
3. Acquired special knowledge and experience in an area of individual interest.
4. Acquired thorough knowledge of the scientific approach to the solution of problems of health and illness in a biological, psychological, and sociological context.
5. Acquired an interest in continuing self-education.
6. Developed positive attitudes toward caring

for the sick and maintaining the health of the well and an understanding of the need to adhere to accepted moral and ethical standards of medical practice.

7. Acquired judgment, knowledge of, and ability to work within personal and environmental limitations.

8. Acquired an awareness of his social and community responsibilities.

We hereby resolve that the undergraduate educational program be so designed and executed as to promote effectively the development of these desired characteristics in our students. To accomplish this, we believe that our educational program should include:

1. The presentation of a body of knowledge basic to medicine, of which a certain core must be mastered by all prospective physicians.

2. Adequate opportunity to acquire basic skills necessary to the practice of medicine, realizing that a certain proficiency must be attained.

3. Curriculum flexibility.

a. Electives sufficient in number to permit acquisition of special knowledge and experience.

b. Free time to be used for research, writing, special projects, special courses in other faculties or experiences in other medical schools.

c. Flexibility to permit exceptional students to seek own pace.

d. Flexibility to permit course omissions where indicated to accommodate special programs, requirements, or desirable individual goals.

4. Increased responsibility for students.

a. Encouragement of individual student initiative.

b. Encouragement of increased direction of own educational program.

c. Encouragement of self-discipline, such as required by adequate application of free time.

5. Interrelated activities with goals of establishing stronger relationships between disciplines, particularly basic sciences and clinical practice.

6. Effective student evaluation based upon examining and grading systems which place the emphasis upon real educational objectives.

7. More personal exposure between faculty and students, recognizing the highly personal nature of medical education and practice.

8. Faculty activities aimed at broad faculty participation in achieving educational goals through effective teaching, curriculum planning, faculty education, and faculty self-evaluation.

9. Continuing curriculum evaluation, development, and coordination as a concept of Committee on Education responsibility effected by recommendations to the Executive Faculty and aimed at directing the educational effort along the lines of the general educational program that is adopted.

After thorough discussion and review by the entire faculty of the medical school, the report of November 9 was unanimously accepted by the Executive Faculty. With the educational objectives thus clearly defined, the Committee is now engaged in dissection and examination of our present curriculum in the light of our established objectives and principles. With the information learned from this experience, the Committee will prepare the outline of a revised program, which will be presented to the faculty for their examination, recommendations and, ultimately, their approval. This study and revision of our program has proved to be a tremendously valuable experience for the members of the Committee on Education, and it is believed that this study will be the ferment which will bring the departments and the faculty of the School of Medicine into even closer alliance in meeting our common objective of producing the most highly qualified physician possible with the resources at our command.

Certain aspects of the program have been accomplished, and others are under formulation by special groups. For example, in recognition of a need to compare our students and their educational achievements with those of other schools, and to establish a baseline of experience as a point of departure in a revised program, the Committee on Education recommended the adoption of the examination of the National Board of Medical Examiners, to be compulsory for all medical students. This recommendation was accepted by the Executive Faculty, and the University of Missouri joins the ranks of a large and increasing number of medical schools which employ the National Board examination in this manner.

A committee of student leaders has been actively formulating recommendations for an Honor System. Plans are being laid to broaden the preceptorship program, wherein the fourth year student, through working with a private physician in his own office and area of practice, attains a depth of experience in the private practice situation. Consideration is being given to the adaptation of a University-wide five year combined Bachelor's and Master's degree program to medicine, wherein select highly qualified students, through attainment of the Master's degree in a basic science discipline, may be admitted

(Continued on page 384)

RUBY POTTER, R.N., Ed.D. ***and***
JANE BRINTON, R.N., M.S., ***Columbia***

The School of Nursing at the University of Missouri

A Progress Report

The School of Nursing with its basic curriculum and its supplemental curriculum for graduate nurses is described. The results of the work of the school, judged by graduates nursing in the State of Missouri, is pointed out.

Miss Potter is Director of the School of Nursing and Professor of Nursing. Miss Brinton is Assistant Director and Professor of Nursing.

THE PEOPLE'S NEED for nursing requires personnel prepared in various types of educational programs. The University of Missouri offers two of the three types of programs ordinarily considered the responsibility of universities. These two, the basic professional curriculum and the supplemental curriculum for graduate nurses, both leading to the degree, Bachelor of Science in Nursing, were described in the April, 1960 issue of MISSOURI MEDICINE.* During this last year progress has been made toward initiation of graduate education in nursing, the third type of education for nursing accepted as the responsibility of universities. Other developments of the year include satisfactory implementation of planned curriculum revisions, approval for full accreditation by the National League for Nursing, and increasing enrollment. In addition to plans for graduate education, progress is being made toward developing a program of research in nursing.

Efforts and the results of these efforts toward helping to meet the nursing needs of the citizens of the state extend beyond the on-campus teaching programs to faculty services to nursing groups throughout the state as well as the services of School of Nursing graduates employed in hospitals and other health agencies.

CURRICULUM REVISIONS

Graduates of today's baccalaureate programs in nursing must be prepared for staff positions in both hospital nursing and public health nursing, be able to progress with experience to positions requiring beginning administrative skills, and have the foundation for continuing development through self-directed study or graduate education. The major curriculum changes implemented in 1960 were: a revised plan for teaching psychiatric nursing in the basic degree curriculum, provision for field experience in public health nursing for students in both the basic degree curriculum and the supplemental curriculum for graduate nurses, and inclusion of selected nursing care experiences in the hospital setting for students in the supplemental curriculum for graduate nurses.

PSYCHIATRIC NURSING

In the revised plan for teaching psychiatric nursing in the basic degree curriculum which

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* Potter, Ruby, and Hofmann, Jean: The School of Nursing at the University of Missouri. Mo. Med. 57:469-72 (April) 1960.

MEDICAL EDUCATION—Continued

directly to the third and fourth years of medical school to earn the M.D. degree.

These and many other objectives will be under active development by the faculty and the Committee on Education. With our great potentiality of recruiting superior students from the State of Missouri, and with the continued fine support of their medical school by the people of the State of Missouri, the future of our educational program seems bright. There will always remain a need for recruitment of highly qualified teachers, intelligent, strongly motivated students, and for a constant reevaluation, reorganization and polishing of the curriculum so that the graduates of our program may continue to support the proud tradition of excellence so long established in Missouri.

was initiated in February 1960, a university faculty member carries full responsibility for both classwork and clinical practice. In previous nursing classes the psychiatric and mental health aspects of nursing care have been included.** The understandings gained through continuing reference to and application in nursing situations prepares the student for a shorter, more intensive, psychiatric nursing experience. Through the cooperation of the personnel of St. Louis State Hospital arrangements were made to center the teaching on one unit which had not been used for teaching previously.

Instances of beneficial effect have been reported which indicate the psychiatric nursing experience has aided the patients on this ward. Patients long hospitalized or more regressed are again learning to communicate and becoming interested in personal appearance and group activities. The students have learned how to revitalize waning interest and to encourage participation. These knowledges and skills are important in all nursing.

PUBLIC HEALTH NURSING

Beginning in 1961 all graduates of both the basic degree curriculum and the supplemental curriculum for graduate nurses will have completed beginning preparation in public health nursing. Field experience is planned in cooperation with the personnel of the Visiting Nurse Association of Greater St. Louis and of the Missouri Division of Health. Prior to 1960 students could, if they wished, elect public health nursing field experience in the program offered by the Visiting Nurse Association of Greater St. Louis, but field experience in rural county units was not offered. In February 1960 the first three students began field experience in rural public health nursing in Barry, Dallas and Lawrence counties. During the first year twenty-two students completed this course in sixteen counties. Teaching is under the direction of a university faculty member with the student working closely with the county public health nurse. In the same period nine students completed the program offered by the Visiting Nurse Association of Greater St. Louis.

There have been informal reports from those who have had direct contact with students in field experience for public health nursing which indicate the success of this plan. The students have received valuable learning experience while participating in the activities of the agency and providing intensive nursing care for selected patients in their homes.

SELECTED NURSING CARE EXPERIENCES

In the revision of the curriculum of the supplemental program for graduate nurses a semester of nursing care experience was planned. The first group completed this in the winter semester of 1960. In this carefully planned practice each student had the opportunity to demonstrate expert complete nursing care for small numbers of patients and to serve as the leader of a group of nursing personnel with varying levels of preparation to provide nursing care for a larger group of patients.

Although the graduate nurses in this program had had previous practice in nursing care of patients, this experience served to deepen and broaden their understanding of complete nursing care and their skill in guiding the care given by personnel with less comprehensive preparation.

ACCREDITATION BY THE NATIONAL LEAGUE FOR NURSING

Both the basic curriculum and the supplemental curriculum for graduate nurses were approved for full accreditation in the May 1960 meeting of the Collegiate Board of Review of the National League for Nursing. This approval was based on the detailed report submitted by the faculty of the School of Nursing and the report submitted by the accreditation survey team following the one week survey in March. With this approval the University of Missouri joins the ranks of 93 of the 172 schools offering basic degree programs and 52 of the approximately 90 schools offering similar programs for graduate nurses. Seeking accreditation by this group is voluntary. The faculty desired to see if its programs would fulfill the high standards which it is possible to set for any voluntary accreditation.

Approval for national accreditation is in addition to the approval of the basic degree curriculum by the Missouri State Board of Nursing. Approval by the state board is essential prior to opening a school of nursing for its graduates to be eligible to take the state licensing examination.

The effects of approval for national accreditation reach beyond the formal recognition that the educational programs meet high standards. Among these are tangible effects for both students and graduates. Scholarships and other types of student aid on the national level are available only to those enrolled in nationally accredited schools. Two students admitted in the

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** This plan was made possible through a grant from the United States Public Health Service.

fall semester, 1960, were awarded national foundation scholarships and future students undoubtedly will be more affected. In certain health agencies, graduates of nationally accredited baccalaureate programs are employed at a higher salary level than those from schools lacking this approval.

Increasing Enrollment

The total enrollment in the School of Nursing was 228 at the beginning of the fall semester, 1960, as compared to 208 at the same period in 1959. The largest increase was in the number of beginning students in the basic baccalaureate degree curriculum.

The fall, 1960, enrollment included students from 63 counties and the City of St. Louis with one student from each of the following counties: Barry, Bates, Callaway, Camden, Cape Girardeau, Chariton, Clark, Cooper, Dade, Daviess, Dunklin, Gasconade, Henry, Howard, Howell, Jefferson, Lawrence, Maries, Mercer, Miller, Monroe, New Madrid, Newton, Nodaway, Osage, Phelps, Platte, Polk, Ripley, St. Clair, Scott, Stoddard and Warren; two students from Audrain, Bollinger, Carroll, Clay, Jasper, Johnson, Lincoln, Livingston, Macon, Marion, Pettis, Randolph, St. Charles, St. Francois, Scotland, Shelby and Vernon; three from Caldwell, Cass, Greene, Linn, McDonald, Madison and Montgomery; four from Saline; five from Franklin; seven from Cole; 17 from St. Louis City; 26 from Jackson; 27 from Boone, and 32 from St. Louis County. Although most of the students in the School of Nursing are residents of Missouri, the fall enrollment included students from ten other states and three foreign countries.

Unquestionably increasing numbers of graduates of current programs are needed. Missouri lags far behind the needs and the national average in the percentage of nurses prepared in basic baccalaureate programs. In 1957-1958, 6.7 per cent of the students graduating from basic professional programs in Missouri graduated from baccalaureate degree programs, while nationwide the percentage was 12.6. Although exact figures are not available, graduates of the supplemental programs for graduate nurses in the state increase somewhat the number with baccalaureate level preparation. However, all estimates indicate that increasing numbers of graduates of baccalaureate programs in nursing are essential if the needs for nursing services of the people of Missouri are to be met.

Graduate Education and Research

Graduate education and research in nursing are essential for continued progress in improvement of nursing care—the research for its contributions to new knowledge and the graduate education to prepare personnel to utilize this knowledge effectively.

Graduate education in nursing, as in other fields, is one of the accepted responsibilities of a university. With the recognition, through accreditation by the National League for Nursing, that the undergraduate programs of the School of Nursing met national standards, the faculty turned its attention toward the development of graduate education in nursing. Active planning is in progress toward the establishment of graduate education under the university graduate school. A survey of employers of nurses and nurses in Missouri and adjacent states has been conducted to determine the need for areas of specialized preparation. The results of this survey are in the process of tabulation and analysis. Although implementation is dependent on the availability of funds beyond the current budget level, additional office space for faculty, and many other factors, it is anticipated that tentative plans could be formulated by fall, 1961.

For the last three years the School of Nursing has been one of the participating schools in a research project on integration of psychiatric aspects in the basic curriculum sponsored by the United States Public Health Service. One of the results to the present time is the change in teaching psychiatric nursing, described previously.

In addition to research for improved teaching with its indirect effect on nursing care, much research is needed which directly studies the effect of nursing activities on the progress of the patient. An application for funds for a study of this type has been submitted by a School of Nursing faculty member. The current request is for pilot study with the expectation that the results will serve as a basis for future research.

Toward Meeting Nursing Needs

The programs of the school extend to many areas of the state through educational opportunities for students from all areas of the state, through employment of its graduates as well as through faculty services for groups from many locations.

Since the current programs were established in 1950 and 1951 the numbers graduating annually have steadily increased. Of the 90 graduates awarded the degree, Bachelor of Science in Nursing, in 1959 and 1960, 52 are known to be employed in hospitals and other health agencies in Missouri. Three are enrolled in graduate programs in nursing, nine are working in other states, one each is in the Army Nurse Corps, the Navy Nurse Corps, and serving on Project HOPE. Of the remaining graduates some are carrying out family responsibilities and for others information was not up-to-date.

Because a large portion of the teaching in nursing is carried out during supervised clinical practice, the students, prior to graduation, have contributed to nursing needs. During 1959-1960 students in the basic degree curriculum and the supplemental curriculum for graduate nurses devoted more than 44,000 hours to nursing care of patients in the University Teaching Hospital alone. These nursing activities, planned in cooperation with nursing service personnel, were supervised by faculty members who devoted approximately 200 hours per week to this teaching. Although located in Columbia the patients who receive this care come from all parts of the state.

Through the University Extension Division the faculty of the School of Nursing teaches in extension courses and participates in providing on-campus workshops and conferences for the nurses of the state. Last fall professional nurses living and working in the Troy area requested that one of the courses of the supplemental curriculum for graduate nurses be offered by extension. The members of the class met at Lincoln County Memorial Hospital to study "Principles in Administration in a Clinical Unit." During the fall semester a faculty member made weekly trips from Columbia to teach this course. Upon request of the Industrial Nurses in Missouri, members of the School of Nursing faculty cooperated in arranging a two day conference held on the campus in March. Suggestions of industrial nurses from various areas of the state were utilized in planning for the conference.

During the year, the requests have increased for faculty members to serve as leaders in workshops and conferences planned to meet the needs of the personnel in specific hospitals and schools of nursing of the state as well as programs for professional organizations. These planned programs for groups are in addition to consultant services of faculty members concerning educational and administrative problems of faculties, nursing service personnel and individual graduate nurses of Missouri.

Future progress of the School of Nursing depends on many interdependent factors. The mounting demands for nursing personnel prepared at baccalaureate and higher degree levels emphasize the need for increasing enrollments and expanding programs. With the facilities of the University Teaching Hospital in full use, clinical facilities are now adequate for teaching larger groups. The increasing numbers of college age youth and the greater interest in collegiate preparation for nursing indicate the potential for increasing numbers of capable applicants. Currently additional scholarship funds for capable students in need of financial assistance are vitally needed and increasing enrollments will intensify this need. Increasing enrollments and expanding programs will require additional well qualified faculty members. Because of the extremely critical nationwide shortage of personnel prepared for this type of teaching and for research, successful recruitment while directly related to salary levels is also dependent on surroundings conducive to maximum efficiency. Currently the space allocated to faculty offices is inadequate for the most productive performance with the present number of faculty members. Expansion of enrollment and programs to the maximum possible with present clinical facilities will require additional office and other space for teaching and research.

Summary

A brief report cannot possibly do justice to all aspects of a developing program. The responses to the curriculum revisions, the plans for expansion of programs to include graduate education, the increasing requests for services to groups throughout the state, and the national recognition as shown through approval for full accreditation by the National League for Nursing are tangible and obvious evidences of progress. Although these represent the major changes, of no less importance are the many faculty activities carried on simultaneously, such as teaching in all other nursing courses, serving as advisers for students of nursing, and participating actively to fulfill university, community and other citizenship responsibilities.

Progress for the future depends on many closely interrelated factors including adequate funds, recruitment of additional qualified faculty members and space for faculty offices, teaching and research.

The most tangible evidence of the success of any educational program lies in the contributions of its graduates. The fact that more than half of those graduating in the last two years are employed in hospitals and other health agencies in Missouri indicates that progress has been made toward fulfilling the purpose for which the School of Nursing was established—to help meet the needs of the people of the state for nursing services.

J. H. Summers, M.D.

President's Message

The Medical Center of the University of Missouri is to be congratulated on this issue of Missouri Medicine. The Medical Center has furnished all scientific and special articles for the second year for the April issue of Missouri Medicine.

Also, the Committee on Publication should be congratulated for its work with the University of Missouri School of Medicine in making this issue possible. The Committee on Publication is appointed by the Council and a President cannot take credit for the work of that Committee.

However, it was my privilege—and duty—to appoint a number of standing and special committees at the 1961 Annual Session, just recently concluded. I attempted in my recommendations to the House of Delegates, and again as I appointed committee members, to stress the great importance of the committees in Association work.

The committees, covering specific phases, are in position to make recommendations to the Council and the House of Delegates and final decisions in many major matters are based on these recommendations. The policies and functioning of the Association, therefore, depend to a great extent on this work by committees.

It is my sincere hope that members accepting appointments on committees will realize the important place they take in Association affairs—and in directing the policies of the practice of medicine.

J. H. Summers, M.D.

EDITORIALS

MEDICAL EDUCATION IN MISSOURI

Medical care in the United States and in the State of Missouri is at the crossroads. Decisions will now be made either by design or default and, in accord with its best tradition, it is hoped that the decisions in our own state will arise from design.

Over the next decade, the population of the United States is expected to grow by more than three and a half million persons per year with a comparatively greater increase among old people and children who, at the same time, require proportionately more medical care.

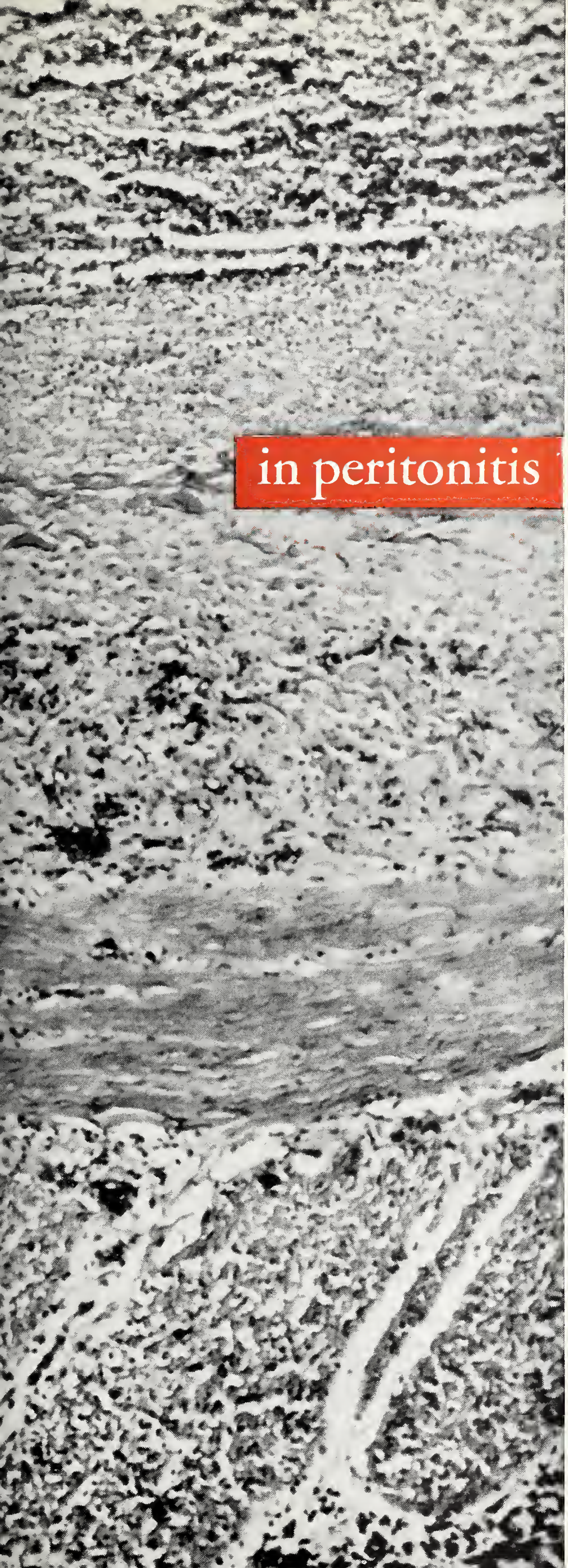
The present national ratio of physicians to population has remained approximately the same over the last 20 years. Change in methods of medical practice and transportation have served to increase efficiency so that with this stable ratio of physicians it has been possible to incorporate most of the new and increasing span of information into medical practice. There is every reason to believe that even with additional individuals coming into the ancillary professions that the present physician-population ratio can be considered no more than sufficient for the future. Even with no change in ratio, current graduating classes of less than 8,000 will need to be increased to more than 11,000 by 1975. Such an increase will require the most effective possible use of existing facilities and the addition of not less than 20 new medical schools within that period of time.

History indicates that nations have risen and fallen, primarily based upon the general state of health of their population. No possession is as dear to an individual as his own state of well being, particularly when it is being threatened. As our health care has become more readily available, many, both inside and outside of the health profession, have begun to take our present good fortune for granted; in fact, health care has on occasion been compared to the public utilities. It is *not* a *natural* resource. Medical care standards can be seriously impaired in a brief period of time by a reduction in the number of available practitioners, a reduction of facilities and/or of ancillary personnel. To avoid this disaster will require the concerted effort of everyone, particularly those trained in the health professions.

The initiative for a full four-year program at the University of Missouri School of Medicine was crystallized by the legislature in 1951. The new hospital and school became an active reality in 1956 when its doors were opened for patients and students. The school has now accepted 80 medical students in its first year class with the hope of increasing this to 85 and then to 90 if the hospital can continue to operate at full capacity. With the tremendous investment which has already been made in the physical plant and the large amount of money which has been placed into the general operation of the Center, it would be extremely unfortunate and foolish economy, indeed, if for lack of a relatively small amount of money it became necessary to close hospital beds, reduce the enrollment and lose the benefit of the investment which has already been made. The requests made this year for expansion purposes have been modest and proportionately less than the increased education and medical service program which would be made possible. These requests have been pared to the bare minimum by the University, and further reduction would endanger the accreditation of the school and hospital program.

Surely in a time when the supply of health personnel is generally conceded to be a national problem, the State of Missouri will want its program in health education to continue to move forward in the same enlightened manner which has marked its progress during the last several years.

Vernon E. Wilson, M.D.



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Ramblings of the Field Secretary

The Northeast Missouri Medical and Dental Assistants Society held an anniversary celebration in the form of a dinner meeting at Hannibal, on Thursday evening, February 16. They invited as their guests the doctors for whom they work and the doctors' wives.

The featured speaker for their after dinner program was Dr. Vernon E. Wilson, Columbia, Dean of the University of Missouri Medical School. Dean Wilson is at his best when appearing before medical or para-medical groups with the opportunity to discuss the new medical school at the University of Missouri. He took this opportunity to point out recent developments and programs at the medical school and to explain numerous offerings there for the training of para-medical personnel as well as physicians. From reports on that meeting the Dean made many new friends in Hannibal. His talk was exceptionally well received by the large group in attendance at this anniversary celebration.

JACKSON COUNTY ASSISTANTS MEET

For the night of February 21 the Jackson County Medical Secretaries and Assistants Society had the temerity to invite yours truly to speak to them. The occasion was the regular February dinner meeting which was held at the Advertising Club in downtown Kansas City. Some 45 members of the society were in attendance. These ladies work in the offices of various members of the Jackson County Medical Society. I was given the opportunity of talking to them on matters of public relations and on the values of membership in their local, state and national medical secretaries and assistants societies. It is my understanding that in Missouri efforts are being exerted to set up memberships so that an individual membership will include local, state and national, or at least state and national where a local society is not organized. This would mean that to hold membership in any one of the levels one would have to be a member on all levels.

The Jackson County Medical Secretaries and Assistants Society was organized in 1938 preceding the organization of the Missouri State Medical Secretaries and Assistants Society some 13 years later. Members of this particular society had a major part to play in the formation of both the state and national organizations. The national association called the American Association of Medical Assistants reached an important milestone in its history in April, 1959, when a national headquarters office was opened in Chicago and a full-time executive secretary employed.

In doing research preparatory to my talk in Kansas City, I was impressed with the apparent need of more information available on schools offering organized courses for medical secretaries particularly. It was a privilege as well as a pleasure to be the guest speaker at this Kansas City meeting of medical secretaries and assistants who are so valuable to their physician bosses in a succesful medical practice.

A.A.G.P. SESSION

"Economics of Medicine—Today and Tomorrow," will be the subject of a unique panel discussion which will open the 1961 Annual Scientific Assembly of the American Academy of General Practice in Miami Beach. The panel discussion will get under way at 1:00 p.m. on Monday, April 17, at Convention Hall in Miami Beach, Florida. The moderator will be J. S. DeTar, M.D., Milan, Michigan, a former president of the American Academy. Other panel members will be Mr. Walter Reuther, President of the United Auto Workers Union; Dr. E. Vincent Askey, President of the American Medical Association; Mr. Roger Fleming, Director of the American Farm Bureau's Washington Office; Mr. Howard Hassard, Legal Counsel for the National Association of Blue Shield Plans, and Mr. R. Conrad Cooper, Vice President of U. S. Steel. The expectations from a panel discussion of this manner should be more than sufficient to direct many physicians to Miami Beach for the 13th Annual Scientific Assembly of the A.A.G.P., April 17-20, 1961.

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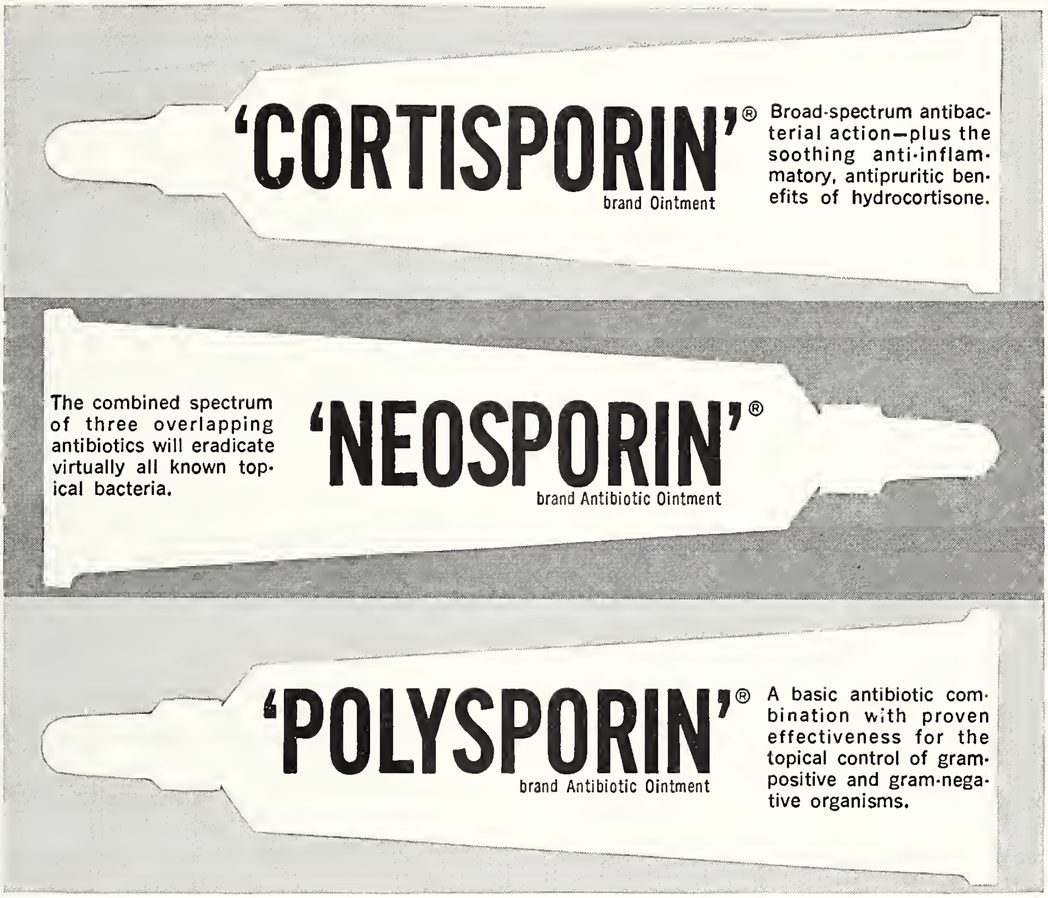

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News—Personal and Professional

Among the seven members of the State Atomic Energy Commission reappointed late in February by the Governor was **Wendell G. Scott**, M.D., St. Louis.

Recipient of a recently established alumni award by the John Carroll University, Cleveland, was **Edmund A. Smolik**, M.D., St. Louis. The award was made for Dr. Smolik's work in neurosurgery, both with St. Louis University and the United States Public Health Service, and for work with the Atomic Energy Commission.

The new president of the Raytown Chamber of Commerce, **D. M. Eubank**, M.D., Raytown, was installed at a dinner meeting in late January.

At a dinner meeting held in St. Louis County to initiate a campaign by the Lions Club in behalf of the University of Missouri's eye tissue bank, **John A. Buesseler**, M.D., Columbia, was the speaker.

Recent hospital staff elections in St. Louis resulted in Dr. **Willard Bartlett**, St. Louis, being reelected president of the medical staff of the St. Mary's Group of Hospitals, with Dr. **Clement B. Grebel**, vice president, and Dr. **James G. Janney**, secretary-treasurer. Dr. **Harvey E. Morris** was reelected president of the Christian Hospital medical staff, with Dr. **H. C. Selle**, vice president, and Dr. **Norman A. James**, secretary. Dr. **George E. Roulhac** was elected president of St. Luke's Hospital medical staff, with Dr. **William F. McGinnis** as vice president, and Dr. **John B. Shapleigh**, secretary-treasurer.

The 12th annual Dr. F. G. Thompson Memorial Lecture will be presented on May 18 at the Clinic Building, St. Joseph, by Dr. O. T. Clagett, of Mayo Clinic. The subject will be "Treatment of Carcinoma of the Breast: A Controversial Subject."

The American Academy of Child Psychiatry has appointed **George J. Lytton**, M.D., Kansas City, to the editorial board of their forthcoming *Journal of Child Psychiatry.*

The McCune-Brooks hospital staff, at a meeting early in February, elected **E. J. McIntire**, M.D., as president. Drs. **W. Russell Smith** was elected vice president, and **M. Foster Whitten**, secretary-treasurer.

The sixth grade of a Cape Girardeau school saw a film on "The Heart and the Circulatory System" and had various medical phases explained to them by **Gordon M. Nunnelly**, M.D., Cape Girardeau, father of one of the pupils.

Chairman for the Jasper County 1961 heart campaign is **Richard R. Cohle**, M.D., Carthage. **E. H. Hamilton**, M.D., Joplin, will be chairman for the Joplin campaign.

Recently elected chief of staff of the Madison County Memorial Hospital, Fredericktown, is **George L. Watkins**, M.D., Farmington.

The Independence Junior Chamber of Commerce recently presented its annual distinguished service award to **Harry Jonas**, M.D., Independence.

The St. Louis Diabetes Association, at a recent election, named **Henry E. Oppenheimer**, M.D., St. Louis, as secretary.

The International College of Chest Physicians, at a meeting in Vienna, Austria, appointed **Michael Bernreiter**, M.D., Kansas City, a member of the International Committee on Electrocardiography and Vectorcardiography.

The Greater St. Louis Society of Clinical Hypnosis has elected **Hanford Phillips**, M.D., St. Louis, as president.

The 11th annual Memorial Lecture at the Menorah Medical Center, Kansas City, will be presented on April 20 at 8:00 p.m. by Alvan L. Barach, M.D., clinical professor of medicine at Columbia University. He will speak on "Physi-

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ologically Based Treatment of Pulmonary Emphysema."

The medical staff of the Neurological Hospital, Kansas City, has elected **Robert S. Terrill,** M.D., as president, and **G. Wilse Robinson,** M.D., as secretary-treasurer.

Newly elected president of the Kansas City Southwest Pediatric Society is **Gerald E. Hughes,** M.D., and **Richard D. Blim,** M.D., is secretary-treasurer.

The Southwestern Surgical Congress will hold its 13th annual meeting at the Park Plaza Hotel, St. Louis, April 10 to 13. **Cyril Costello,** M.D., St. Louis, is chairman of the local arrangements committee.

DEATHS

Wimber, Thomas C., M.D., St. Louis, a graduate of Washington University School of Medicine, 1923; member of St. Louis Medical Society; aged 63; died February 5.

Thompson, Arthur M., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1918; member of St. Louis Medical Society; aged 70; died February 11.

Simmons, Leroy, M.D., Sarcoxie, a graduate of University of Kansas Medical School, 1906; member of Jasper County Medical Society; aged 79; died February 15.

O'Connell, John, M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1914; member of St. Louis County Medical Society; aged 73; died February 25.

NEW MEMBERS

Howard D. Adams, M.D., 114 N. Waters St., Liberty, has become a member of the Clay County Medical Society. Dr. Adams is a native of Iowa, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri School of Medicine in 1957.

Richard Baldwin, M.D., 600 S. Glenstone St., Springfield, has become a member of the Greene County Medical Society. Dr. Baldwin is a native of Florida, received his preliminary education in Maryland, and his M.D. degree from Loyola University in 1953.

Joseph F. Carron, M.D., Festus, has become a member of the Jefferson County Medical Society. Dr. Carron is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1958.

Albert L. Howe, M.D., 601 S. Brentwood Blvd., St. Louis, has become a member of the St. Louis County Medical Society. Dr. Howe is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Missouri University School of Medicine in 1957.

Leo E. Johns, M.D., Kansas City General Hospital, Kansas City, has become a member of the Jackson County Medical Society. Dr. Johns is a native of Texas, received his preliminary education in Louisiana, and his M.D. degree from Tulane University in 1943.

Walter T. Judge, M.D., Box 146, Crystal City, has become a member of the Jefferson County Medical Society. Dr. Judge is a native of Minnesota, received his preliminary education in South Dakota, and his M.D. degree from the University of South Dakota in 1953.

Ernest Lorenc, M.D., Professional Bldg., Springfield, has become a member of the Greene County Medical Society. Dr. Lorenc is a native of Iowa, received his preliminary education in Iowa, and his M.D. degree from the University of Iowa in 1954.

Andrew J. Randolph, M.D., 2206 E. 18th St., Kansas City, has become a member of the Jackson County Medical Society. Dr. Randolph is a native of New Jersey, received his preliminary education in Washington, D. C., and his M.D. degree from Howard University in 1945.

Robert C. Schaan, M.D., 9293 Watson Rd., St. Louis, has become a member of the St. Louis County Medical Society. Dr. Schaan is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1953.

Miles C. Whitener, M.D., 8923 Midland Blvd., St. Louis, has become a member of the St. Louis County Medical Society. Dr. Whitener is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1955.

John L. Wright, M.D., 320 N. 2nd St., Poplar Bluff, has become a member of the Butler-Ripley-Wayne County Medical Society. Dr. Wright is a native of Missouri, received his preliminary education in Arkansas, and his M.D. degree from the University of Arkansas School of Medicine in 1955.

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County Society News

FIRST DISTRICT

Buchanan County Medical Society

Dr. C. Thorpe Ray, Professor and Chairman, Department of Medicine of the University of Missouri Medical Center, was the speaker at the February 1 meeting of the Buchanan County Medical Society. He discussed "The Current Management of Hypertension."

Forty-five St. Joseph and Northwest Missouri doctors attended the dinner and meeting in the Oak Room of Hotel Robidoux. Dr. Judson M. Hughes, President, presided. The speaker was introduced by Dr. Lucien W. Ide.

The speaker discussed various drugs used in the treatment of hypertension and their results and possible side effects. He emphasized the value of early diagnosis and treatment as well as means of prevention of hypertension or of preventing it becoming severe by early detection and prompt measures of treatment.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

Fifty-five members, wives and guests of the Grand River Medical Society met at the Strand Hotel in Chillicothe on February 9 for the regular February dinner meeting of the Society. Guests present were: Dr. Jack M. Martt, Director of the Heart Station and Associate Professor of Internal Medicine at the University of Missouri; Mr. Watson Dershone, Executive Director of the Missouri Heart Association; Mrs. Joseph Miguelon, Chillicothe; Dr. and Mrs. Pemberton of Mendon; Mr. Glen Gutridge, Northwest Regional Consultant of the Missouri Heart Association, and his son Barry Gutridge; Mr. Pickell, Administrator of the Pershing Memorial Hospital in Brookfield, and Mrs. Pickell; Mr. and Mrs. Robert Wheeler (Nancy Bohnsack and her husband); Mr. Win Ochsner of Ross Laboratories and Mr. Don Simm of McNeil Drugs.

Following the dinner, President Clark introduced the guests, following which the ladies retired to their own meeting where Mrs. Joseph Miguelon gave a review of a best selling book entitled "The Wastemakers" by Packard. The book, a discussion of planned obsolescence, was considered an appropriate subject with the nearness of the Easter shopping season.

Dr. Martt addressed the doctors and introduced a 25 minute film entitled, "Diagnostic Features in Common Congenital Heart Defects." After the showing of the film, Dr. Martt discussed treatment and answered questions from the audience. He informed those present that definitive diagnosis and treatment of patients through 21 years of age could be obtained through the Crippled Children's Service and that it could be performed at either St. Louis University, Missouri University, or Kansas University Medical Centers.

At the business meeting which concluded the evening program, Dr. Donald Dowell, Councilor, announced a meeting of delegates and alternates to be held at the Robidoux Hotel in St. Joseph, March 2. Dr. Clark read an announcement from the Division of Health regarding a series of Nursing Home Institutes to be held at various locations throughout the state.

Some of the pros and cons of the Kerr-Mills Bill were discussed and the cons of the present version of the Forand Bill were reaffirmed. The meeting was then adjourned.

Frank R. Daley, M.D., *Secretary*

SECOND DISTRICT

Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, February 9.

The Society was most fortunate in having R. O. Muether, M.D., President of the Missouri State Medical Association, as their featured guest speaker. His subject was "Your Missouri State Medical Association." In his discussion he covered various projects which the State Medical Association was promoting. Among these were a recently established Medical Student Loan fund which, as of January 31, 1961, has made available approximately $20,000 to some 33 students now enrolled in medical schools who are residents of Missouri.

Dr. Muether pointed out that these students do not have to begin repaying the loans until after they begin their practice of medicine. Dr. Muether explained efforts of the Association to financially support the American Medical Education Foundation for aid to the nation's medical schools. He also discussed the physician placement service of the Association which helps to locate physicians where they are needed over the state.

President Szymanski presided.

He went into considerable detail in discussing the Kerr-Mills Law, which was passed by Congress in 1960 providing additional federal funds for expanding existing medical care programs for the aged. This law requires matching funds by the states and is administered by the states.

Dr. Muether's talk generated interest.

Mr. Ray McIntyre, Field Secretary of the State Association who was present, added a few comments on the physician placement service indicating that the state of Missouri is beginning to have a number of the medical school graduates at Missouri University locate in out-state Missouri.

William Meinershagen, M.D., from the Missouri Division of Health, spoke briefly on the tuberculin skin testing program in the schools of Randolph County.

The meeting was presided over by the Society's President, Dr. Stanley R. Szymanski, Moberly. Members present were: Drs. Thomas S. Fleming, J. Will Fleming, Jr., Avery P. Rowlette, Stanley R. Szymanski, C. C. Cohrs, L. E. Huber and Robert Hasson, Moberly; Donald Eggleston and Carl Rinker, Macon; G. C. Rice and D. D. Stuart, Brunswick; F. L. Harms, Salisbury; F. A. Barnett, Paris, and P. V. Dreyer, Huntsville. An additional guest was Dr. Leopold Lachance, Centralia.

J. W. Fleming, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Moose Lodge in Hannibal, on Tuesday night, February 21.

The scientific program for the evening was presented by John Buesseler, M.D., Chief of Ophthalmology, University of Missouri Medical School, Columbia. He first presented a film entitled, "Inflammatory Diseases of the Eye," and then further discussed the points presented or alluded to in the film. His discussion particularly brought forth questions and comments from the audience.

This program represented the third of its type presented before our Society. That is, the showing of a film and then a discussant to further develop the subject. These have been experimental projects promoted by the Commission on Education of the American Academy of General Practice, in cooperation with the Education Committee of the Missouri Academy.

This program was well received by our Society members present and we are most grateful to Dr. Buesseler for his presentation.

Wyeth Hamlin, M.D., *Secretary*

FOURTH DISTRICT

Jefferson County Medical Society

A meeting of the Jefferson County Medical Society was called to order at Jefferson Memorial Hospital on Tuesday, January 24, at 8:30 p.m., by President Harry Yoskit, M.D. Other members present were: Drs. E. J. Senn, R. H. Allbee, Harold Donnell, R. H. Donnell, B. Bolgar, J. F. Rutledge, K. V. McKinstry, W. T. Judge, J. L. Mayfield and F. L. Kozal.

The first order of business was the presentation of an application for membership from Joseph F. Carron, M.D., who plans to locate in Festus. His credentials being in order, he was unanimously elected to membership in the Society.

The annual election of officers was then held and Dr. Bolgar was named President, Dr. Allbee Vice President, and Dr. Kozal was reelected as Secretary-Treasurer. Dr. Kozal was elected delegate to Missouri State Medical Association and Dr. Yoskit was named alternate delegate.

There being no further business, the meeting was adjourned and refreshments served by members of the kitchen staff at the hospital.

F. L. Kozal, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air in Wentzville on Thursday evening, February 23. The evening festivities began with a social hour followed by dinner and then the program.

Mr. C. L. Coleman, Field Representative for the Social Security Administration of the Clayton, Mo., office, was present to show the new social security disability film entitled, "The Disability Decision." This film has been developed primarily for showing to medical groups in order to help answer many of the questions which physicians have concerning the social security disability law.

Mr. Glen Swisher from the Missouri Department of Rehabilitation, with headquarters at Jefferson City, was also present and took part in the discussion following the showing of the film.

It is believed that physicians will find this film worth-while and may wish to have it shown before one of their local medical society meetings. In this respect it is suggested that contacts be made with the local social security offices to request a showing of the film.

V. P. Muenster, M.D., *Secretary*

FIFTH DISTRICT

Fifth Councilor District Meeting

Fifty-eight physicians attended a meeting of the Fifth Councilor District at the Missouri Hotel in Jefferson City, on Thursday night, February 23. The evening festivities began with a social hour where old friendships were renewed and new friends made. This was followed by a bountiful smorgasbord dinner and then the program.

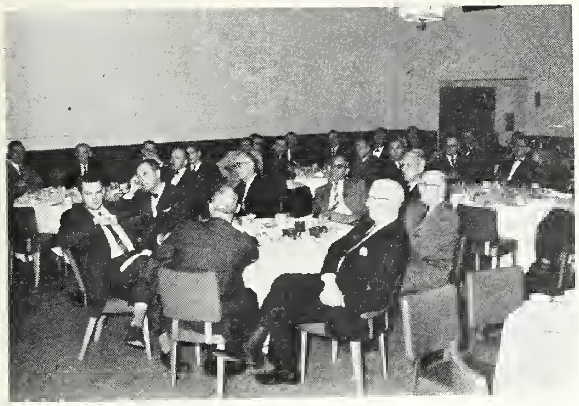
Dr. Muether was the first speaker. Mr. Foristel, Dr. Stuart, Mr. O'Brien and Dr. Matthews were among those at the speakers' table.

Robert Tanner, M.D., President of the Cole County Medical Society, host for the meeting, opened the formal part of the program with a warm welcome to all present. After a few brief remarks, he turned the meeting over to the councilor.

The first speaker for the evening was R. O. Muether, M.D., St. Louis, President of the Missouri State Medical Association, who spoke on the subject "Your Missouri State Medical Association." He discussed various important projects being implemented and others discussed by committees and the Council of the Association. These included the Medical Student Loan Fund, Physician Placement Service, indigent care programs, financial support for the American Medical Education Foundation, the Kerr-Mills Law and health care of the aged, and other matters which will come before the House of Delegates at the March 1961 meeting of the Association in Kansas City.

Mr. James Foristel from the Washington office of the American Medical Association spoke on "The Current Situation in Washington." He gave an interesting and informative down-to-earth discussion of the proposals on the federal level for health care to the aged. This of course, had to do with the proposal to place much of the health care of those 65 and over, who are covered by social security, under the social security administration.

Mr. T. R. O'Brien, Executive Secretary of the State Medical Association, discussed current health bills before the Missouri Legislature and explained a number of these in detail.



The audience remained at their tables for the discussions.

The meeting began on time and ended on time and we believe that those present were well rewarded for their evening spent at this meeting.

The district is grateful to the Cole County Medical Society for making the local arrangements and acting as host for the occasion.

BYRON STUART, M.D., *Councilor*

SIXTH DISTRICT

WEST CENTRAL MISSOURI MEDICAL SOCIETY

The regular monthly meeting of the West Central Missouri Medical Society was held February 9, at the Nevada Country Club, Nevada.

As usual a social hour preceded the meeting and is truly an enjoyable hour when doctors can get together and even talk shop as we always do, with a highball in the hand, relaxed and pleasant. Following the social hour we enjoyed the fine cooking we always get from the chef of the Nevada Country Club, in the form of a wonderful steak, salad, hot rolls, the usual baked potato and butter without cholesterol, plenty of hot coffee and a delicious pie slice—who could wish for more. After partaking of the dinner so described, our President Bob Magee, M.D., called the meeting to order.

Since this was an important meeting and many were to be heard on the panel program, the reading of the minutes was dispensed with and we passed on to the panel program on "Trauma."

President Bob Magee introduced the panel moderator, who to us needed little introduction, Dr. John Growdon, Kansas City, general surgeon, who took over. He in turn introduced Richard Kiene, M.D., orthopedist of Kansas City; Clarke Henry, M.D., Kansas City, thoracic surgeon; F. A. Carmichael, Jr., M.D., Kansas City, Mo., neurosurgeon. They were to discuss trauma as related to their special fields with Dr. Growdon starting off the discussion as moderator and with the program to end with a question and answer period. Each speaker used his time most admirably and we truly enjoyed this program. Following the closing of the panel presentation the floor was open for discussion of questions presented. This is the meat of any program. This entire program would have been rated as Four Plus with marked positive reaction.

Following the scientific program the president called a meeting of our own group for a short session. The secretary presented the financial status of the organization and made recommendation that since some meetings have gone so far in the red that it would be best to raise the dinner fee to $4.00, instead of the usual $3.00. A motion to this suggestion was made, seconded and passed.

The Society was appreciative of the efforts of our guest panelists for such a fine presentation and can heartily recommend it to our neighboring societies for some future program.

Those present besides our guest speakers were: Drs. C. H. Isbell, F. S. Wetzel, M. F. Whitten, Carthage; S. A. Grantham, and Cecil Meares, Joplin; Roy Pearse, L. P. McCann, C. B. Davis, W. H. Allen, W. S. Love, James J. Pascoe, Nevada; President Bob Magee, Eldorado Springs; William B. Richter, Stockton; William H. Ellett, Appleton City; Donald H. Giesler, Osceola; Claude Allen, Rich Hill; A. L. Hansen and Carter Luter, Butler.

The Society previously had voted to postpone the March meeting and to pass the April meeting to Butler, the May meeting to Harrisonville, and to have the meeting in June at Nevada with the lawyers, dentists and the doctors, with possibly golf in the afternoon and a dinner meeting at night. The meeting adjourned until the April meeting in Butler.

CARTER W. LUTER, M.D., *Secretary*

EIGHTH DISTRICT

DALLAS-HICKORY-POLK COUNTY MEDICAL SOCIETY

A dinner meeting of the Dallas-Hickory-Polk County Medical Society was held at Humansville, on Wednesday night, February 1. A social hour preceded dinner and the formal program.

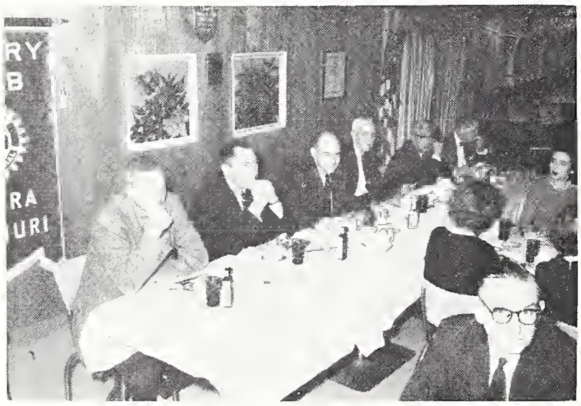
We were most fortunate to have with us G. O. Proud, M.D., Department of ENT, University of Kansas Medical School, Kansas City, Kansas, who presented the scientific part of the program. Dr. Proud presented a film entitled "Emergency Air Way—Crisis and Action." Following the showing of this film, he discussed additional points of the subject and then led a lively informal discussion with audience participation. This film was developed under Dr. Proud's direction and its showing, plus the accompanying discussion, was one of the best programs our Society has had for some time.

Evelyn P. Griffin, M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society and the doctors' wives held a dinner meeting at Zeke's Cafe in Aurora on Tuesday night, February 14. The scientific program for the evening was the third in a series of film presentations followed by a discussion of the subject presented by the film by a selected discussant.

For this particular program the film shown was entitled "Stress and the Adaptation Syndrome." This film presents some of Dr. Selye's theories. The discussant for the film was Thorpe Ray, M.D., Professor and Chairman, Department of Internal Medicine, University of Missouri Medical School, Columbia.



Dr. Ray, the speaker, is shown seated third from left.

Dr. Ray did an outstanding job of discussing the film and answering questions from the audience. Judging from the results of questionnaires filled out by those present regarding the value of this type program, it would appear that here lies a fertile field for well planned programs for county medical societies.

More than 30 doctors were present to profit from this program. Walter W. Tillman, M.D., Springfield, Councilor, was a welcome guest along with Ray McIntyre, Field Secretary of the Missouri State Medical Association. Dr. Tillman gave a brief talk pointing out a number of matters which will be brought before the House of Delegates at the Association meeting, March 19-22 in Kansas City.

A good percentage of the membership was present.

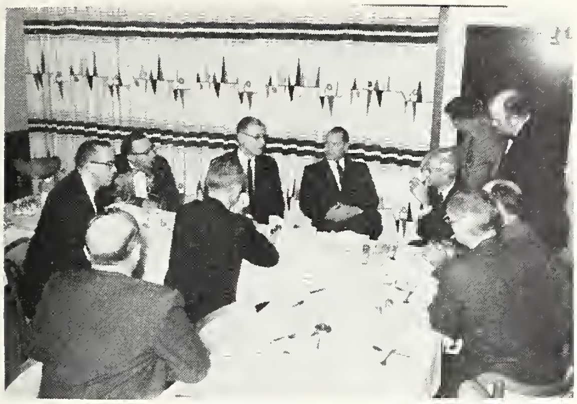
Fred Brown, M.D., *Secretary*

NINTH DISTRICT

Mid-Missouri County Medical Society

The Mid-Missouri County Medical Society held an outstanding meeting at the Munger-Moss Cafe in Lebanon, on Thursday night, February 16. In addition to the doctors' wives, members of the Society invited lawyers and their wives from the respective counties making up the Mid-Missouri Society.

Members of the Society and lawyers and their wives showed interest in the program.



A business meeting followed the formal program.

Approximately 60 people attended this gala affair. The evening festivities began with an enjoyable social hour where many new acquaintances were made. This was followed by an excellent dinner and then a special talk given by Attorney Fred Hall, tax expert, from Springfield.

Mr. Hall spoke on "Estate Conservation for Doctors." His was an interesting discussion and one well received by those in attendance. Following the formal program, a short business meeting of the Mid-Missouri Medical Society was held.

M. K. UNDERWOOD, M.D., *Secretary*

TENTH DISTRICT

BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY

The Butler-Ripley-Wayne County Medical Society met at the Hickory House on January 27, for its regular monthly meeting.

The meeting was under the direction of Dr. Omar E. Hagebusch and Dr. T. J. Cooper, pathologists of St. Louis, on the "Papanicolaou Smear of the Cervix and the Early Diagnosis of Carcinoma." It was a most interesting presentation with movies and slides for illustration of the pathology. Many questions were asked throughout the course of the discussion. Our medical society attendance continues to be excellent with 75 per cent of the members present at this meeting.

The meeting was adjourned at 10:00 p.m.

E. T. HANSBROUGH, M.D., *Secretary*

MEETING OF FEBRUARY 15

The Butler-Ripley-Wayne County Medical Society met at Westwood Hills Country Club at 6:30 p.m., February 15, for a dinner meeting.

The scientific portion of the program was presented by Dr. William H. Perkins, Chief of the Radioisotope Service, Veterans Administration Hospital, Little Rock, Arkansas. Dr. Perkins presented a brief history of the discovery of radioactive materials through the production of atomic bombs to the postwar use of isotopes in medicine. He spent a great deal of time in discussing the use of radioisotopes in the diagnosis of thyroid disease and in treatment of the thyroid malignancies with its advantages and possible disadvantages. He discussed the more common uses of other radioisotopes, including the use of radioactive chromium tagged B-12 and blood volume determinations.

General discussion on the genetic effects of radiation followed showing the possible future effect that it would have on future generations as well as the longevity of the present generation. He even went into the experimental program, that he was in charge of, with the labeling of such products as digitalis, Bence Jones protein, Demoral and various other experimental products that he had under way. The entire program was illustrated with slides. Dr. Perkins had a common calculator present for demonstration. The entire program was filled with many questions from the audience as to the possible future role in medicine of radioisotopes.

The meeting was adjourned at 10:00 p.m.

E. T. HANSBROUGH, M.D., *Secretary*

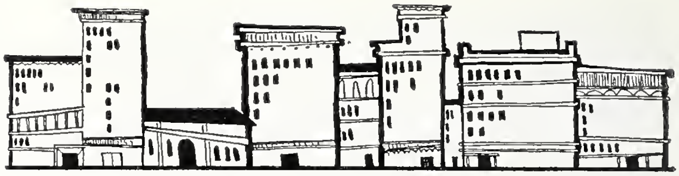
MINERAL AREA COUNTY MEDICAL SOCIETY

C. Read Boles, pediatrician of St. Louis, spoke before the Mineral Area County Medical Society at its meeting on Thursday night, February, 23, held in the Clinic Building of the State Hospital in Farmington. Dr. Boles presented an interesting and informative discussion on "Pediatric Problems and Immunizations." His presentation evoked many questions from the audience and the informal discussion that followed his formal talk was of much value.

A good percentage of the membership was present. The ladies also took this occasion to hold a meeting.

PAUL DENNIS, M.D., *Secretary*

From the Medical Schools



ST. LOUIS UNIVERSITY

Grants

The United States Public Health Service has awarded the St. Louis University School of Medicine continuation and new research and training grants totaling $543,092 it was announced by Dr. James W. Colbert, Jr., Dean.

Research grants awarded the School total $305,499 while training grants are in the amount of $237,593.

Largest training grant award of $73,995 went to Dr. Edward A. Doisy, director of the department of biochemistry, for the expansion of postgraduate study in the field of biochemistry. The award supports traineeships and supplements the stipends of the current trainees in the department of biochemistry.

Other postgraduate training grants awards and the directors of the various programs are:

Dr. George E. Thoma, Jr., assistant professor of internal medicine, $52,503 for the support of postgraduate studies in the field of nuclear medicine; Dr. Dermott Smith, assistant professor of neurology and psychiatry and assistant dean, $32,776 for the support of training in psychiatric studies; Dr. Jack Zuckner, assistant professor of clinical medicine, $9,504 for graduate training in arthritis for the purpose of training personnel in the field of rheumatic diseases; Dr. William A. Knight, Jr., associate professor of internal medicine, $21,600 for the support of graduate training in arthritis and metabolic diseases; Dr. Vallee L. Willman, assistant professor of surgery, $25,000 to provide the facilities and personnel for the coordination of all cancer activities in the medical school and University hospitals; Dr. C. Rollins Hanlon, professor of surgery and director of the department, $11,944 for the training of young surgeons in cardiovascular technics, both in the clinical area as well as in the experimental laboratory. All phases of cardiovascular surgery are touched on during a year's training. Dr. Hanlon also received an award of $4,925 for the sponsorship of a trainee to spend a year in the diagnosis and care of a cancer patient. Dr. LeRoy Sante, professor of radiology and director of the department, was awarded a $5,346 grant for cancer clinical traineeships.

Largest research grant, in the amount of $32,334, was awarded to Dr. Ralph A. Kinsella, Jr., associate professor of internal medicine, for the studies of the metabolism of hormones of newborn babies. The grant, for a three-year period, totals $91,642.

A new grant of $16,611 was awarded to Dr. William A. Knight, Jr., associate professor of internal medicine and director of the section of gastroenterology, and Dr. George E. Gantner, assistant professor of pathology. They will investigate enzymes which are present in the liver and the pancreas. The study is for the investigation of changes in the distribution of the enzymes in the blood and tissues in the normal and diseased organs. Special technic and methods will be used for the measurement and demonstration of these enzymes in patients with liver and pancreatic diseases, particularly neoplastic diseases.

A second new grant of $7,337 was awarded to Dr. Gantner for a chemical determination of specimens and tissues to predict how long a person has been dead. The grant, for a two-year period, totals $15,421. The work, being done in cooperation with the St. Louis County Coroner's Office, will aid the accuracy and speed of a medical investigation of traumatic deaths. Working with Dr. Gantner on this investigation are Dr. P. Raphael Caffrey and Dr. William Sturner, residents in pathology.

Dr. Henry Pinkerton, director of the department of pathology, was awarded a $13,714 grant award for studies of the salivary gland viruses in tissue culture. The human type of virus, which is a cause of death in infants, is acquired before the child is born yet the mother shows no indication of illness. The grant for a two-year period totals $32,034.

Another grant of $8,970 supports the research investigations of Dr. Richard C. Hard, Jr., assistant in pathology. Drs. Pinkerton and Hard are studying the experimental production of hpyogammaglobulinemia. They are attempting to reduce the gammaglobulin level in the blood, since antibodies are present in the gammaglobulin and interfere with transplantation of tissues and organs. Methods which reduce the gammaglobulin will tend to make the organ and tissue transplants more successful.

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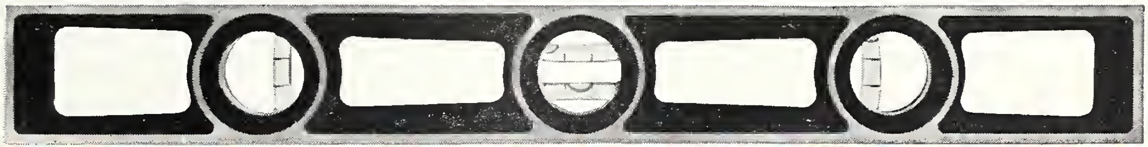

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Other recipients were Dr. Harold L. Segal, assistant professor of pharmacology, $13,668 for a senior research fellowship for a study of enzymatic responses to environmental influence; Dr. Irving A. Coret, assistant professor of pharmacology, $11,500 for an investigation into responses of muscle to chemical agents and to light; Dr. Kermit Christensen, professor of anatomy and acting director of the department, a grant of $11,443 for research into the innervation of blood vessels.

Dr. Christensen and his associates hope to point the way to a solution of the perplexing problems concerning the functional nerve endings in effector tissues, especially in relation to the smooth muscle in the walls of blood vessels.

Dr. C. Rollins Hanlon, director of the department of surgery, received a research award of $6,575 for a study to determine the effect of supplying mechanical assistance to the heart which is in failure and a grant of $5,750 for a project involving the study of cardiac function following open-heart surgery. Dr. Hanlon and Dr. Vallee L. Willman, assistant professor of surgery, also received an award of $6,737 to support a study designed around the problem of complete heart block following open heart operations, in an attempt to determine the effects of the various forms of therapy usually employed.

Dr. R. Walter Schlesinger, director of the department of microbiology, was awarded a grant of $28,750 for studies on the mechanism of latent virus infections of human tissues; Dr. Karl G. Lark, assistant professor of microbiology, was awarded a grant of $15,525 for the support of research on the normal and abnormal growth of bacteria; Dr. Maurice Green, professor of microbiology, was awarded a grant of $27,439 for an investigation of the basic chemical events occurring in normal and cancerous tissues, when they are infected with viruses. Dr. Green's studies are aimed at understanding the controlling mechanisms of virus infections. The findings may eventually prove useful in designing chemotherapeutic agents to combat virus diseases. Dr. Moton M. Weber, assistant professor of microbiology, was awarded a grant of $21,936 for a study of the possible role of vitamin K as an intermediate in the transport of cellular energy.

Dr. Alrick B. Hertzman, director of the department of physiology, was awarded a grant of $24,653 for a study of circulatory responses to heat stresses and a $16,675 award for studies on the nasal blood vessels. Dr. John P. Wyatt, professor of pathology, received a grant of $18,531 for an investigation on the pathogenesis of silicosis. Dr. Goronwy O. Broun, professor of internal medicine, received a grant award of $17,351 for a study of factors in the invasion of the brain by encephalitis viruses.

UNIVERSITY OF MISSOURI

Research Wing Completed

The new five-floor Research Addition to the University of Missouri Medical Center is now being opened for use by the clinical research faculty of the School of Medicine, relieving severe overcrowding in the Center's clinical departments. Construction of the addition, which is an integral part of the Teaching Hospital, was completed this month. Full occupancy will require several weeks.

The Research Addition provides the clinical departments with some 25 additional laboratories, eight office-laboratories, 15 offices and storage rooms, rest rooms, two conference rooms, and other accessory space. Two floors have been assigned to the Department of Surgery; one each to the Department of Medicine and the Department of Pediatrics; and one floor to the Department of Obstetrics and Gynecology and the Department of Preventive Medicine.

Meetings

The University of Missouri School of Medicine will hold its annual Spring Clinical Conference on May 11 and 12, 1961, on the campus of the University of Missouri. The conference this year will focus upon "Steroid Therapy," and will have as guest speakers: Tom R. Hamilton, M.D., Professor of Microbiology, University of Kansas School of Medicine; William J. Harrington, M.D., Associate Professor of Medicine, Washington University School of Medicine; John M. Howard, M.D., Professor of Surgery, Hannemann Medical College; Dwight J. Ingle, M.D., Professor of Physiology, University of Chicago; Vincent C. Kelley, M.D., Professor of Pediatrics, University of Washington School of Medicine; Kermit E. Krantz, M.D., Professor of Obstetrics and Gynecology, University of Kansas School of Medicine; Theodore C. Panos, M.D., Professor of

Pediatrics, University of Arkansas School of Medicine; Theodore B. Schwartz, M.D., Associate Professor of Medicine, University of Illinois College of Medicine, and James C. Warren, M.D., Assistant Professor of Obstetrics and Gynecology, University of Kansas School of Medicine.

Members of the University of Missouri faculty who will participate are: Constantine A. Anast, M.D., associate professor of pediatrics; Norman D. Asel, M.D., associate professor of medicine (dermatology); Thomas W. Burns, M.D., associate professor of medicine; John M. Franz, Ph.D., assistant professor of biochemistry; and C. Thorpe Ray, M.D., professor of medicine.

The topics to be covered on Thursday, May 11 are: "Basic Principles Involved in Steroid Therapy, Biochemical, Pharmacological and Endocrinological Aspects" with Dr. Burns as moderator and Drs. Franz, Ingle, Kelley and Schwartz parpticipating; "Steroid Therapy in the Pediatrics Age Group" by Dr. Panos; "Steroid Therapy in Hematologic Diseases" by Dr. Harrington, and "Steroid Therapy in Dermatologic Diseases" by Dr. Asel.

On Friday, May 12, the topics and speakers will be: "Steroid Therapy in Surgery" by Dr. Howard; "Steroid Therapy in Collagen Diseases," with Dr. Ray as moderator and Drs. Hamilton, Kelley and Schwartz participating; and "Steroid Therapy During Pregnancy and Early Infancy" with Dr. Anast as moderator and Drs. Krantz, Panos and Warren participating.

Program announcements will be mailed by April 12, 1961. Anyone interested who has not received a program by this date should write Dr. Charles H. Koelling, director, Postgraduate Medical Education, Room M-176, University of Missouri Medical Center, Columbia, Missouri.

The Spring Meeting of the Eastern Missouri Branch, Society of American Bacteriologists, was held at the Medical Center on March 25. Several investigators presented results of original research in microbiology at the scientific meeting.

Guest speaker was Dr. Roger Reid, Office of Naval Research, Director, Division of Biology. Also on the program was Dr. A. D. Alexander, Chief, WHO/FAO Leptospirosis Reference Laboratory, Walter Reed Army Institute of Research.

A meeting of the Central Missouri Regional League for Nursing was held Feb. 9, in the Med-

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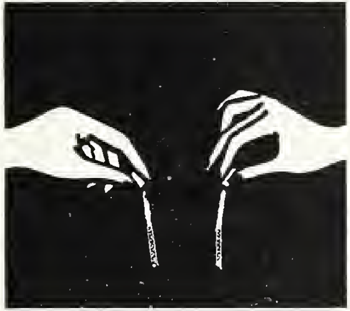

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ical Center Auditorium with Mrs. Bonnie C. Hofmann, assistant professor of nursing at the University and president of the League presiding.

Dr. Quentin F. Schenk, associate professor of social work at the University, spoke on "Your Community and Mental Health," the theme of the League for the current year.

A meeting of the 7th District of the Missouri State Nurses Association was held at the Medical Center February 19 with approximately 65 persons attending. The busines meeting was followed by a lecture given by Dr. David Davis, assistant professor of psychiatry, on "Drug Addiction." Refreshments were served after the program.

Gifts and Grants

A grant of $84,611 over a period of five and one half years has been awarded to the University of Missouri by the Public Health Service of the Department of Health, Education and Welfare in support of training graduate students in the Department of Microbiology in the School of Medicine.

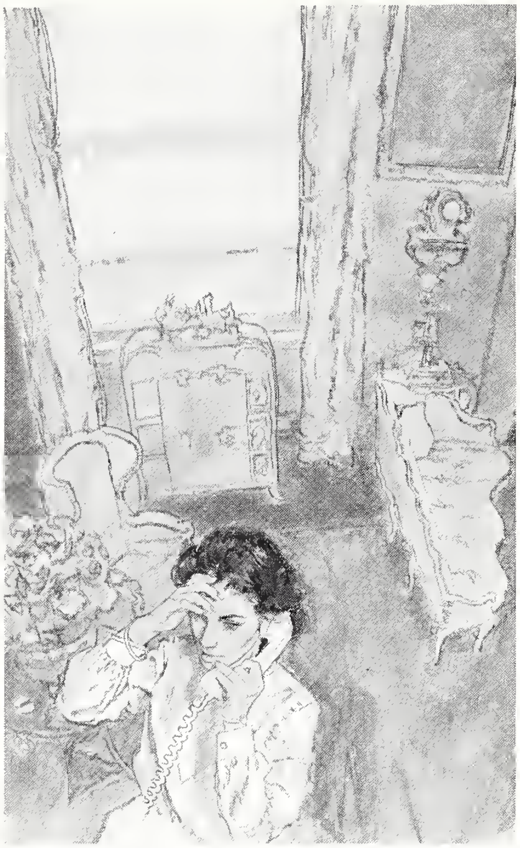
The grant, under the direction of Dr. Frank B. Engley, Jr., chairman of the department of microbiology, will allocate $26,375 to the University for the first year and one half and $14,559 each year thereafter for the next four years. It is for the period from Jan. 1, 1961 to June, 1965. The program is officially entitled "Training Program in Microbiology."

Assisting Dr. Engley on this program are: Dr. Herbert S. Goldberg and Dr. James T. Barrett, associate professors of microbiology, and Dr. Michael H. Ivey and Dr. Donald P. Durand, assistant professors of microbiology. The purpose of the grant is to expand the graduate training program in microbiology at the University.

A research grant of $7,387 has been awarded to the University of Missouri by the Public Health Service of the Department of Health, Education and Welfare for support of a study of the effects of antibodies to the pancreas and pancreas functioning.

The grant, under the direction of Dr. James T. Barrett, associate professor of microbiology, is for the period from Jan. 1 to Dec. 31, 1961. It is renewable for two additional years. Dr. Barrett's project is entitled "Immunologic Studies With Pancreas."

Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department, has been awarded a grant in the amount of $3,000 by the State of Missouri Division of



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Dr. Ian M. Thompson, chief of the division of urology, was awarded a U. S. Public Health Service Grant in the amount of $56,000 for research into the mechanisms of kidney function. (This grant was listed in the last month report as being in the amount of $5,600.)

Visitors

Oscar V. Batson, M.D., noted anatomist and chairman of the Department of Anatomy of the Graduate School of Medicine, University of Pennsylvania, gave four talks at the University of Missouri School of Medicine February 16 and 17.

Dr. Batson, an alumnus of the University of Missouri, gave a major talk on "The Flow of Blood in the Vertebral Vein System," in which he described experiments performed by using an x-ray image amplifier and recorded on moving picture film, and spoke to the freshman medical students in two talks on February 16, and presented "Radiologic Anatomy of the Temporal Bone" before the staff and students of the department of radiology on February 17.

The University of Misouri awarded Dr. Batson an honorary Doctor of Science degree in 1952, for his "services as a great teacher and research worker." He has been with the University of Pennsylvania since 1928. Dr. Batson is the recipient of numerous honors and awards for his work in medical science.

Dr. Charles E. Horton, plastic surgeon from Norfolk, Virginia, visited the medical center from January 29 to February 1. He participated in the Surgical Conference and presented a talk on "Recent Concepts of Plastic and Reconstructive Surgery" to members of the surgery staff, residents and students.

Special Appointments

Dr. Gwilym S. Lodwick, associate dean and chairman and professor of the department of radiology, and Dr. Theodore E. Keats, professor of radiology, were initiated as Fellows of the American College of Radiology in Chicago on February 10.

Dr. David Davis, assistant professor of psychiatry, has been appointed a Teaching Fellow of the American Fund for Psychiatry for the academic year 1961-1962. Only six or seven such appointments are made each year from among

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*J.A.M.A. 163: 359, 1957 (Feb. 2)

the many psychiatrists nominated by medical schools throughout the United States.

These appointments are made to support outstanding young psychiatrists in careers in teaching and research and assist in the development of investigative and training programs. The appointment carries with it a grant in the amount of $4,000 which will be used in support of a new teaching program in social psychiatry for medical students at the University of Missouri Medical Center, which Dr. Davis will direct.

Trips and Talks

Dr. M. D. Overholser, professor and chairman of the department of anatomy, attended a meeting of the Board of Directors of the Georgia Brown Blosser Home for Crippled Children at Marshall, Mo., on February 8.

Drs. O. J. Koeppe and A. A. White, associate professors, B. J. Campbell, assistant professor and Lucile Adamson, research assistant professor, visited with the St. Louis Biochemistry group and heard a lecture by Dr. Harlan Wood of the Western Reserve University, Cleveland, Ohio.

Dr. J. M. Martt, associate professor of medicine and director of the heart station, gave a presentation and discussion of a new film entitled "Common Congenital Heart Defects" at a meeting of the Grand River Medical Society and its Woman's Auxiliary February 9, in Chillicothe. Between 30 and 50 M.A.G.P. members attended the meeting.

Dr. Herbert S. Goldberg, associate professor of microbiology, addressed an advanced short course for water and sewage works operators at the School of Engineering, January 24. His subject was "Pathogenic Bacteria and Other Micro-organisms in Water and Sewage."

Dr. James T. Barrett, associate professor of microbiology, attended a course titled "Serologic Methods in Microbiology" at the Communicable Disease Center, Atlanta, Georgia, from January 22 to February 10. While in Georgia, Dr. Barrett also visited the department of microbiology at the University of Georgia in Athens, and the department of microbiology at Emory University School of Medicine in Atlanta, Georgia.

Dr. Robert L. Jackson, professor and chairman of the department of pediatrics, attended the College of Home Economics at the University of Tennessee in Knoxville, on February 10. The University of Tennessee has been developing a postgraduate nutrition educational program at both the Masters and Ph.D. level and periodically has guest faculty members for seminars.

Dr. Jackson also spent from January 18 to 20 in New Orleans, La., attending a meeting of the

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Literature available to physicians on request.

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American Diabetes Association and various committee meetings and a meeting of the editorial board, and the Food and Nutrition Council of the American Medical Association on January 19. This committee meeting was chaired by Dr. Jackson, being a review of the current status of nutrition teaching in American medical schools. The Council on Foods and Nutrition is tentatively planning to have this subject discussed at the American Association of Medical Colleges meeting next fall and also is planning a teaching conference in the summer of 1962.

Dr. A. B. Westfall, professor and chairman of physiology-pharmacology, Dr. D. K. Meyer, professor, and Dr. J. E. Randall, associate professor of physiology-pharmacology, visited the new University of Kentucky Medical Center at Lexington, Kentucky, January 20. The object of the visit was to inspect the teaching and research electronic equipment installed in the Physiology and Pharmacology Department at the new medical center.

Dr. Arthur W. Merrick, associate professor of physiology-pharmacology, attended "Lectures in Aerospace Medicine" conducted by the School of Aviation Medicine, Brooks Air Force Base, Texas, January 16-20. Dr. Merrick also gave two lectures on Endocrinology to the Preventive Medicine course in the department of microbiology, February 14 and 16.

Dr. James M. A. Weiss, associate professor and acting chairman of the department of psychiatry, attended a meeting of the advisory council of the Research Unit of the Washington University School of Nursing, January 20. Dr. Weiss is a consultant in psychiatry to this unit.

Dr. Weiss also spoke to the meeting of the Research Colleagues at the Medical Center on "Research in the Psychiatric Problems of Aging," January 24. The meeting was a report of a program of research which has been conducted by Dr. Weiss and his associates both at Washington University in St. Louis and at Missouri University Medical Center during the last four years.

Dr. David Davis, assistant professor of psychiatry, gave a one-hour lecture followed by a discussion on the concept of malingering with special reference to "its historical roots and present-day usage," January 24, at Washington University School of Medicine, Department of Psychiatry.

On January 19, Dr. Davis gave a one-hour lecture on drug addiction with a 15 minute discussion period to the Seventh District of the

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Missouri State Nurse Association at the Medical Center. His talk was on "Drug Addiction."

Dr. Theodore E. Keats, professor of radiology, was a guest at the Southwestern Medical School in Dallas, Tex., on January 19, where he presented a talk on "Intravenous Aortography." On January 21, Dr. Keats was a guest speaker at the meeting of the Texas Radiological Society in Fort Worth, Texas. He gave three talks there entitled: "Some Aspects of the Cine and High-Speed Serialographic Techniques," "Plain Film Diagnosis of Congenital Heart Disease," and "Roentgen Aspects of Endocrine Problems."

Dr. Donald Q. Cochran, assistant professor of radiology, gave a talk to a Civil Defense Class in Columbia on the "Bio-Medical Aspects of Radioactive Fallout."

Dr. John J. Modlin, professor and chairman of the department of surgery, and Dr. John Landor, assistant professor of surgery, attended the Society for University Surgeons' meeting at the University of Kansas, February 9 through 11. In addition, Dr. Modlin and Dr. Carl Almond, assistant professor of surgery, attended the meeting of the Central Surgical Association in St. Louis, February 16 through 18.

Dr. Hugh E. Stephenson, Jr., professor of surgery, spoke on "Cardiac Arrest" at the Coronado Hotel at the Institute for Nurse Anesthetists conducted by the American Hospital Association in cooperation with the American Association of Nurse Anesthetists in St. Louis, January 16.

Dr. Kenneth K. Keown, professor of surgery (anesthesiology), presented "Recognition and Management of Heart Failure in the Operating Room" at a meeting of the Kansas City Academy of Medicine, January 20, in Kansas City. Dr. Keown also presented the same talk at the Veterans Hospital in Wadsworth, Kansas, January 20.

Dr. Peter Moulder, associate professor of surgery at the University of Chicago School of Medicine, visited the University of Missouri Medical Center February 8, and participated in the Weekly Surgical Conference and Grand Rounds.

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The new $2,285,000 Spencer T. Olin Residence Hall at Washington University School of Medicine was dedicated in February. Dr. Robert A. Moore, president and dean of the Downstate

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Medical Center, State University of New York, gave the principal address. Dr. Moore, who was dean of Washington University School of Medicine when the fund campaign for the new dormitory was begun in 1952, discussed "A Residence Hall as an Educational Facility." Also participating in the ceremonies were Mr. Spencer T. Olin, St. Louis, one of the primary donors of dormitory funds; Dr. Samuel Grant, St. Louis, who was instrumental in the inauguration and continuance of the alumni dormitory fund campaign during the last eight years; Washington University Chancellor Ethan A. H. Shepley; Dr. Dempsey, who was presiding administrative officer during the dedication; and Scott Diettert, junior medical student, who represented dormitory residents. Following the dedication program, alumni, faculty, students and special guests toured the new dormitory at 4550 Scott.

Lectures

Dr. Emmanuel C. Amoroso, professor of physiology at the Royal Veterinary College, University of London, delivered the annual Robert J. Terry Lecture in March. Dr. Amoroso, whose work since 1945 has been concentrated on the structure and function of the placenta and the physiology of reproduction, discussed patterns of reproductive behavior, from fish to man. In 1957 he was elected to the Royal Society of Great Britain and his research papers have been published in the *Proceedings of the Royal Society* and in other scientific journals. A medical graduate of the University College, Dublin, he did further study at schools in Berlin and London and in 1929 was awarded the McArdle Medal in Surgery and a traveling fellowship in science at the National University of Ireland. He was appointed to the staff of the Royal Veterinary College in 1935. The Robert J. Terry Lecture, established by Washington University School of Medicine in 1938, honors Dr. Terry, who headed the department of anatomy at Washington University School of Medicine from 1900, until his retirement from teaching in 1941. Now professor emeritus, he is living with a daughter in Weston, Mass., where he observed his 90th birthday in January.

In February, Dr. Harold B. Hewitt of the John Burford Carlill Pathological Laboratories, Westminster School of Medicine, London, delivered a lecture sponsored by the Medical Education for National Defense group at Washington University School of Medicine. Dr. Hewitt, a pathologist, discussed survival curves of tumor cells following irradiation *in vivo*. He was elected

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Dornwal will calm the patient but won't make him drowsy or give him feelings of depersonalization. And what's more, while Dornwal most assuredly tranquilizes, it won't interfere with most other medications that your subsequent examination or laboratory studies may indicate.

Since every man in general practice encounters such situations almost daily, it makes good sense to keep some tablets in one's bag, doesn't it? We will be glad to send you a supply.

Dosage: One or two 200 mg. tablets three times a day. Children, age 6 to 16, one or two 100 mg. tablets two times a day. Administration limited to three months' duration.

Supplied: 200 mg. yellow scored tablets, and 100 mg. pink tablets, each in bottles of 100 and 500.

P.S. For the "Genericist", Dornwal is amphenidone

No absolute contraindications to the use of Dornwal are known. There have been no reports or evidence of habituation, addiction or drug tolerance in animal or clinical studies. Dornwal is relatively free from untoward effects when administered at recommended dosages.

Maltbie Laboratories Division,
Wallace & Tiernan Inc., Belleville 9, N. J.
PDW-12

to the Royal Society of Great Britain and is a member of the British Institute of Radiology. His research investigations have been published in several British medical journals.

Dr. Daniel C. Tosteson, associate professor of physiology, discussed "Enzymatic Aspects of Active Sodium and Potassium Transport" at a Symposium on Membrane Transport presented in conjunction with the fifth annual meeting of the Biophysical Society held in February in St. Louis. Dr. Floyd E. Bloom, assistant in medicine; Dr. Gordon M. Schoepfle, associate professor of physiology, and Dr. David B. McDougal, Jr., assistant professor of pharmacology, presented a a research paper on "Studies on the Kinetics of Procaine Acetyl Choline Antagonism." The four day meeting was held in the Chase Hotel, with more than 600 biophysicists from the United States and several foreign countries in attendance. Washington University School of Medicine staff members, who assisted in arrangements for the meeting, included: Dr. William W. Sleator, Jr., associate professor of biophysics in physiology; Dr. Schoepfle; Dr. Catherine Smith, research assistant professor of otolaryngology, and Dr. Leonard J. Tolmach, associate professor of chemistry in radiology.

Grants

Two assistant professors of biological chemistry at Washington University School of Medicine have received $47,788 in new grants from the United States Public Health Service for research involving body enzymes.

Dr. Carl Frieden has been awarded $24,000 to determine what role configurational changes of enzymes play in the catalytic reaction.

A $23,788 new grant to Dr. Ernst Helmreich will support research on the localization of phosphorylase in muscle.

Dr. Eli C. Robins, professor of psychiatry, has been granted $27,184 by the St. Louis-St. Louis County New March of Dimes to study the chemical and metabolic patterns of various cells of the central nervous system.

So pure ... So good ... So wholesome for everyone ... including the tiniest tots!
7UP
7UP
Nothing does it like Seven-Up!

New, more effective analgesic

Kills pain.....stops tension

For neuralgias, dysmenorrhea, upper respiratory distress, and postsurgical conditions—new compound of Soma, phenacetin and caffeine kills pain, stops tension, reduces fever—gives more complete relief than other analgesics...acts fast, relief lasts four to six hours.

NEW NONNARCOTIC ANALGESIC

soma® Compound

Composition:
Soma (carisoprodol), 200 mg.;
phenacetin, 160 mg.;
caffeine, 32 mg.
Dosage: 1 or 2 tablets q.i.d.
Supplied: Bottles of 50
apricot-colored, scored tablets.

References available on request.

WALLACE LABORATORIES
Cranbury, N. J.

NEW FOR MORE SEVERE PAIN

soma® Compound + codeine

BOOSTS THE EFFECTIVENESS OF CODEINE: Soma Compound boosts the effectiveness of codeine. Therefore, only ¼ grain of codeine phosphate is supplied to relieve the more severe pain that usually requires ½ grain. **Composition:** Same as Soma Compound plus ¼ grain codeine phosphate. **Dosage:** 1 or 2 tablets q.i.d. **Supplied:** Bottles of 50 white, lozenge-shaped tablets; subject to Federal Narcotics Regulations.

FINANCIAL STATEMENT FOR THE YEAR 1960

LENNERTSON & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
214 SOUTH BEMISTON AVENUE

ROBERT A. LENNERTSON, C.P.A.
MEMBER—AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS
RICHARD J. LENNERTSON, C.P.A.
ST. LOUIS 5, MISSOURI

Missouri State Medical Association,
634 North Grand Blvd.,
St. Louis, Missouri

Gentlemen:

The accounting records of the Missouri State Medical Association were reviewed for the year 1960 and a report thereon is presented together with the following statements:

Exhibit A	Balance Sheet
Exhibit B	Income Statement
Exhibit C-1	Statement of Investments
Exhibit C-2	Statement of Committee and Meeting Expenses
Exhibit D	Dues Receivable and Membership by Counties

It should be noted that members' dues are taken into income on the cash basis; whereas the other accounts are maintained on the accrual basis. Items paid in advance, except members' dues, are shown as prepaid and carried forward to the year to which they apply.

Scope of Examination

The Balance Sheet at December 31, 1960 and the Income Statement for the year ended with that date were reviewed. Examinations or tests were made of the accounting records, in the manner and to the extent deemed appropriate, without making a detailed audit of the transactions.

Cash in banks, as shown by the books, was reconciled with the regular monthly bank statements and confirmations received from the depositaries. The petty cash fund of $25.00 was counted. Recorded cash receipts for the year were traced in total into the bank accounts as deposits and disbursements for the period were substantiated by an inspection of paid checks, purchase invoices and other data on file.

Investments with a cost of $130,872.83, as listed in Exhibit C-1, were confirmed by a statement from the custodian, Mercantile Trust Company. Investment income of $4,901.26 consists of the following:

Interest on Bonds	$3,300.00
Add—1960 Share of Net Discount on Purchase of Bonds	674.06
Income From Bonds	$3,974.06
Dividends on Stocks	927.20
Total Investment Income	$4,901.26

During the year, the Missouri State Medical Association appropriated $25,000.00 from the Surplus Account and $25,000.00 from current income for the establishment of a fund to be known as Missouri State Medical Foundation. This fund is to be used for loans for the education of medical students who are residents of Missouri. At year-end the fund consisted of

Loans (22 Students)	$14,765.00
Cash	35,235.00
Total Fund	$50,000.00

Income Statement

The financial result of the activities of the Association for the year 1960 was an excess of income over expenses of $4,393.93 as set forth in Exhibit B. Exhibit C-2, supporting Exhibit B, presents a summary of committee and meeting expenses for the year.

Selective tests were made of the income and expense accounts for the period. It was noted that space in The JOURNAL was contributed to the United States Treasury Department for bond advertising and to members and widows of members for small classified ads.

Balance Sheet

The financial position of the Association at December 31, 1960 is presented in Exhibit A. Additional comments follow on Balance Sheet accounts.

Accounts Receivable—Advertisers $10,504.34, represented the unpaid balances due from Advertisers at the year end. Of this amount $10,423.34 was due from the State Journal Advertising Bureau for the months of November and December 1960.

Unpaid Dues of $498.75, offset by a reserve account in like amount, represents 1960 dues of delinquent members carried at the requests of the local societies. Other delinquent members were dropped from membership in accordance with the by-laws. Exhibit D presents a summary of unpaid 1960 dues, and membership by counties, as shown by the records of the Association.

Furniture and Fixtures continue to be stated in the fixed amount of $1,000. Repairs during the year in the total of $219.58 were charged to expense in lieu of depreciation.

Records and data on file were carefully reviewed for liabilities at December 31, 1960 and it is believed that all current liabilities of substantial amount are included in the Balance Sheet. The by-laws require the Association to furnish financial assistance, not to exceed $300, on each mal-practice suit. The Association states that it has no knowledge of any pending suits at the end of the year.

Endowment life policies with disability benefits, on the lives of four employees, were in effect during the year 1960. One of the policies has a cash value of $16,293.60 at the year-end. A new employees' pension plan was worked out by a special committee and approved by the Director of Internal Revenue on December 8, 1960. In connection therewith, $14,562.81 has been transferred to the Trustees for the Missouri State Medical Association Employees' Pension Trust. A confirmation was received from the depositary in verification of this balance which is accounted for as follows:

Cash accumulated to December 31, 1959	$11,290.95
Year 1960	
Employee's Contributions	1,017.00
M.S.M.A. Contributions	2,254.86
Total	$14,562.81

Exhibitors have made advance payments of $4,213.75 for annual session exhibit space and these payments will be taken into income when earned in 1961.

General

Insurance policies were inspected and the following general insurance was in force at the close of the year:

Insurance on	*Type of Coverage*	*Amount*
Furniture and Fixtures	Fire and Extended Coverage (80 per cent co-ins.)	$6,500
Employees	Workmen's Compensation	Statutory
Lessee's Liability	Bodily Injury	$25,000/50,000
Treasurer	Fidelity Bond	$20,000
Employees (except Vice President and Secretary)	Fidelity Bond	$5,000
Automobiles of Executive Secretary and Field Secretary	Non-ownership—Bodily Injury	$50,000/100,000
	Non-ownership—Property Damage	$5,000

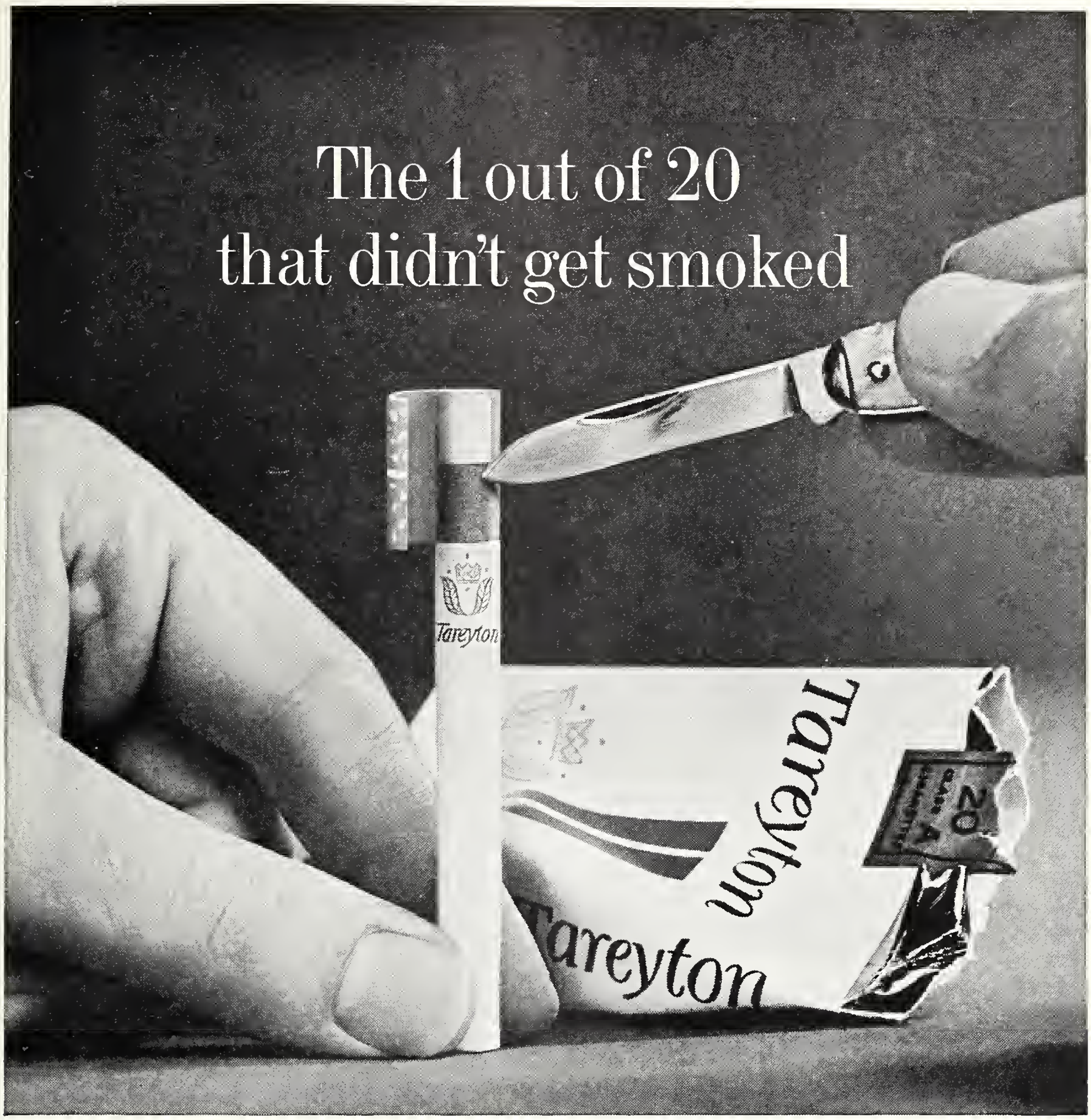
Subject to the comments thereon, the attached statements, in our opinion, present fairly the financial position of the Missouri State Medical Association at December 31, 1960 and the financial results of its activities for the year then ended, in accordance with accepted principles of accounting applied on a basis consistent with that of the preceding year.

Yours very truly,
LENNERTSON & COMPANY,
Certified Public Accountants.

EXHIBIT A

Missouri State Medical Association
Balance Sheet, December 31, 1960

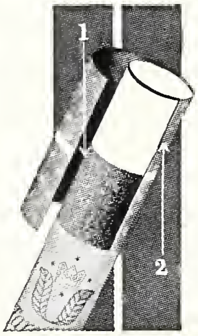
Assets		
Cash		
Mercantile Trust Company (Treasurer's Account)	$ 30,167.53	
Mercantile-Commerce National Bank (Secretary's Account)	139.26	
Petty Cash Fund	25.00	$ 30,331.79
Investments at Cost		
U. S. Government Bonds	$ 98,843.95	
Corporate Bonds	5,000.00	
Common Stocks	27,028.88	
Total (Market Value $129,733.04)		130,872.83
Missouri State Medical Foundation		
Cash	$ 35,235.00	
Student Loans Receivable	14,765.00	
Total	$ 50,000.00	
Due Trustees for Fund	50,000.00	....
Accounts Receivable		
Advertisers	$ 10,504.34	
Mercantile Trust Company—Investment Custodian	1,097.82	11,602.16
Dues Receivable—Exhibit D		498.75
Furniture and Fixtures (at stated value)		1,000.00
Advances for Travel Expenses		326.54
		$174,632.07
Liabilities		
Accounts Payable		
Supplies and Expenses	$ 1,484.95	
Payroll Taxes	317.59	
American Medical Association	87.50	$ 1,890.04
Deferred Credit to Income		
Advance Payments by Exhibitors		4,213.75
Contingent Liability to Members on Mal-Practice Suits—None Reported		
Reserve for Uncollected Dues		498.75
Reserve for Future Activities		
Balance January 1, 1960	$188,635.60	
Contribution to Missouri State Medical Foundation	25,000.00	
Balance	$163,635.60	
Excess of Income Over Expenses for Year 1960 (Exhibit B)	4,393.93	168,029.53
		$174,632.07



There's a lot of satisfaction in pointing out something good to a friend. That's why it sometimes happens that one cigarette out of a pack of Dual Filter Tareytons never does get smoked.

People open it to show its remarkable Dual Filter containing Activated Charcoal. They may not know why it works so well, but they do know this: it brings out the *best* taste of the *best* tobaccos. Yes, Tareyton delivers the flavor . . . and the Dual Filter does it!

Try a pack of Dual Filter Tareyton. We believe the extra pleasure they bring will soon have you passing the good word to your friends.



Tareyton delivers the flavor . . .
DUAL FILTER DOES IT!

HERE'S HOW: 1. It combines a unique inner filter of ACTIVATED CHARCOAL . . . definitely proved to make the taste of a cigarette mild and smooth . . .

2. with a pure white outer filter. Together they select and balance the flavor elements in the smoke. Tareyton's **flavor-balance** gives you the best taste of the best tobaccos.

DUAL FILTER Tareyton

Product of The American Tobacco Company — "Tobacco is our middle name" © A. T. Co.

Exhibit B

Missouri State Medical Association Income Statement for the Year 1960

Particulars	*General Activities*	Journal *Publication*	*Total*
Income			
Dues Received (includes $1.50 per member annually for The Journal)	$106,787.50	$ 5,055.00	$111,842.50
Rentals—Annual Session Exhibit Space	10,850.00		10,850.00
Subscriptions to The Journal—Nonmembers		232.61	232.61
Advertising Space—The Journal		68,376.99	68,376.99
Investments	4,901.26		4,901.26
Collection Fees on A.M.A. Dues	785.25		785.25
Rental Income—Office Space	585.00		585.00
Total Income	$123,909.01	$73,664.60	$197,573.61
Expenses			
Salary—Executive Secretary	$ 9,600.00	$ 4,800.00	$ 14,400.00
Office Salaries	23,305.83	11,652.92	34,958.75
Employees' Retirement Insurance Premiums	4,245.14		4,245.14
Employees' Pension Plan Contribution	2,254.86		2,254.86
Office Rent and Light	4,610.33		4,610.33
Postage	2,423.17	1,000.51	3,423.68
Stationery, Printing and Office Supplies	3,539.28		3,539.28
Dues and Subscriptions	418.50		418.50
Directories and Clipping Service	1,225.01		1,225.01
The Journal—Paper, Printing, etc.		42,726.96	42,726.96
Cash Discounts to Advertisers		383.72	383.72
Commissions on Journal Advertising		5,454.26	5,454.26
Telephone and Telegraph	2,555.05		2,555.05
Insurance—General	248.15		248.15
Insurance—Blue Cross	251.25		251.25
Professional Fees	3,919.22		3,919.22
Taxes—Payroll and Personal Property	1,042.17		1,042.17
Traveling Expense—Executive Secretary	490.25		490.25
Traveling Expense—Field Secretary	2,976.61		2,976.61
Committee and Meeting Expenses (Exhibit C)	38,172.43		38,172.43
Equipment Repairs in Lieu of Depreciation	219.58		219.58
General Expenses	164.12		164.12
Custodian Fees—Investments	275.36		275.36
Student Awards	225.00		225.00
Missouri State Medical Foundation Contribution	25,000.00		25,000.00
Total Expenses	$127,161.31	$66,018.37	$193,179.68
Excess of Income or (Excess of Expenses)	$ (3,252.30)	$ 7,646.23	$ 4,393.93

Exhibit C-1

Missouri State Medical Association Statement of Investments, December 31, 1960

U. S. Treasury 2½% Bonds 6/15/67-62	Par $15,000	$ 14,412.22
U. S. Treasury 2½% Bonds 12/15/68-63	Par $10,000	9,798.95
U. S. Treasury 2½% Bonds 6/15/69-64	Par $10,000	9,726.55
U. S. Treasury 2½% Bonds 3/15/70-65	Par $10,000	9,665.56
U. S. Treasury 2½% Bonds 3/15/71-66	Par $ 6,000	5,373.68
U. S. Treasury 2⅝% Bonds 2/15/63	Par $10,000	10,000.00
U. S. Treasury 3 % Bonds 2/15/64	Par $ 5,000	4,798.22
U. S. Treasury 4 % Bonds 8/ 1/61	Par $10,000	10,028.93
U. S. Treasury 4 % Bonds 10/ 1/69	Par $25,000	25,039.84
Pacific Gas and Electric 4½% Bonds 6/1/90	Par $ 5,000	5,000.00
Central and Southwest Corp. 200 Shares		6,345.62
Johns-Manville Corp. 100 Shares		5,582.34
Morgan Guaranty Trust Co. of N. Y. 50 Shares		5,106.55
Standard Oil Company of Calif. 91 Shares		5,059.00
Union Carbide Corp. 37 Shares		4,935.37
Total Cost		$130,872.83

Exhibit C-2

Missouri State Medical Association Statement of Committee and Meeting Expenses For the Year 1960

Annual Session		$ 8,547.00
Council Meetings and Councilors' Expenses		5,437.89
Delegates to A.M.A.		3,771.52
Public Relations		8,879.27
Public Service		8,090.21
Woman's Auxiliary		1,691.28
Committees:		
Aging	$ 77.25	
Cardiac Disease	25.71	
Civil Defense	329.81	
Corporate Practice	156.41	
Infant Care	80.69	
Laboratory Medicine	84.23	
Maternal Welfare	97.03	
Medical Economics	51.35	
Medical Education and Hospitals	33.26	
Mental Health	154.40	
Public Policy and Public Relations	80.30	
Rural Medicine	14.75	
Scientific and Postgraduate Work	306.30	
Tuberculosis	72.03	
Venereal Disease	191.74	
Total		1,755.26
Committee and Meeting Expenses for the Year		$38,172.43

Exhibit D

Missouri State Medical Association Dues Receivable and Membership by Counties December 31, 1960

Counties	MEMBERSHIP *Active*	*Junior*	*Honor*	*Total*	*Unpaid Dues*
Andrew	4		1	5	
Audrain	16		2	18	
Barton-Dade	7	1		8	
Benton			1	1	
Boone	76	15	3	94	$ 52.50
Buchanan	73	3	10	86	
Butler-Ripley-Wayne	33	1	1	35	
Callaway	11	1	6	18	
Cape Girardeau	40	2	5	47	
Carter-Shannon	1			1	
Chariton-Macon-Monroe-Randolph	26	2	3	31	
Clay	47	7	4	58	
Clinton	5			5	
Cole	38	1	4	43	
Cooper	10	1	1	12	35.00
Dallas-Hickory-Polk	7		1	8	
Dunklin	15	4	4	23	
Franklin-Gasconade-Warren	26			26	
Grand River	40	1	7	48	
Greene	136	5	11	152	
Henry	10	3	1	14	35.00
Howard	6			6	
Jackson	592	65	124	781	8.75
Jasper	58	1	10	69	35.00
Jefferson	17			17	
Johnson	9	2	1	12	
Lafayette-Ray	19	2		21	
Lewis-Clark-Scotland	2		1	3	
Lincoln-St. Charles	22		1	23	
Marion-Ralls-Shelby	23	2	5	30	35.00
Mid-Missouri	31	4		35	
Miller	2			2	
Mineral Area	24	2	3	29	35.00
Moniteau	5			5	35.00
Montgomery	3		1	4	
Morgan	4			4	
Nodaway-Holt-Atchison-Gentry-Worth	17	1	2	20	
North Central	11		4	15	
Ozarks	41	5	7	53	70.00
Pemiscot	11	8	3	22	
Perry	9		2	11	
Pettis	23		6	29	
Pike	4	4	3	11	17.50
Platte	5	1		6	17.50
St. Louis City	999	156	109	1,264	87.50
St. Louis County	387	20	42	449	
Saline	18	2	3	23	35.00
Semo	28	3	6	37	
South Central	18	4	4	26	
Webster	2	1	1	4	
West Central	27	2	9	38	
Totals	3,038	332	412	3,782	$498.75 (A)

(A) Delinquent dues of members at December 31, 1960 carried at the requests of local societies.

Budget for 1961

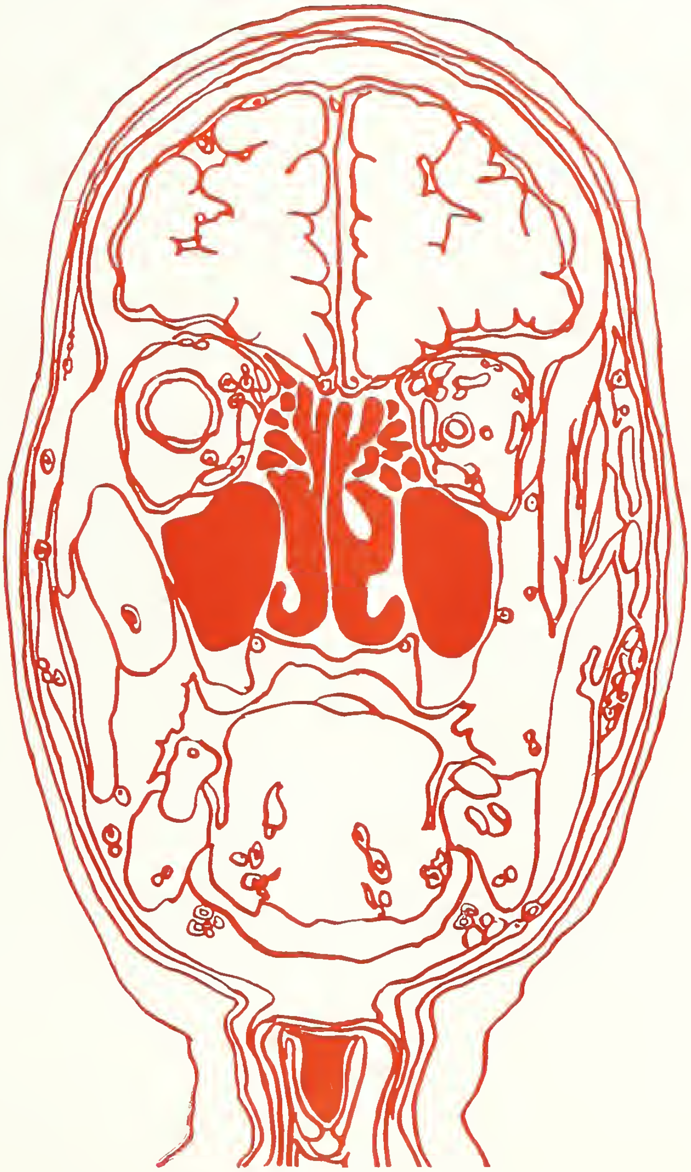
Salaries	$ 65,700.00
Office Rent and Light	4,700.00
Postage	4,700.00
Printing, Stationery, Supplies	4,000.00
Journal Expense, Paper and Printing	52,000.00
Telephone and Telegraph	3,000.00
Insurance, Employees Pension Plan	7,187.00
Professional Fees	4,000.00
Taxes, Payroll	1,900.00
Travel Expense	6,000.00
Committees	37,850.00
Furniture and Fixtures	1,000.00
General Expense	3,000.00
Total	$194,337.00

for acute
upper respiratory infections

Tetrex® capsules

The Original Tetracycline Phosphate Complex U.S. PAT. NO. 2,791,609

effective control of pathogens...with an unsurpassed record of safety and tolerance



BRISTOL LABORATORIES, SYRACUSE, NEW YORK
Div. of Bristol-Myers Co.

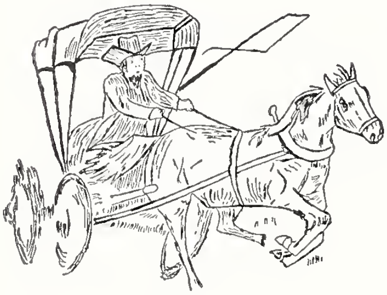
BRISTOL™

SUPPLY: TETREX Capsules – tetracycline phosphate complex – each equivalent to 250 mg. tetracycline HCl activity. Bottles of 16 and 100.

TETREX Syrup – tetracycline (ammonium polyphosphate buffered) syrup – equivalent to 125 mg. tetracycline HCl activity per 5 ml. teaspoonful. Bottles of 2 fl. oz. and 1 pint.

LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

It is common knowledge among our members that the recent session of the legislature passed three bills affecting the practice of medicine and the hospitalization of the sick which are so reactionary that if they are signed by the Governor, the state will be opened to the graduates of every low-grade medical college in the country, disorganize the management of every hospital in the state, and give cults the right to practice medicine according to their peculiar conception of disease processes. A vigorous campaign against these bills culminated in a hearing before Governor Hyde at which leading citizens from St. Louis, Kansas City and other towns informed the Governor that the operation of these laws would have disastrous effects upon the public. The bill removing the word "reputable" from the medical practice act as it affects medical colleges will undoubtedly open the state to an influx of graduates from low-grade medical schools that the board of health will be compelled to examine for license to practice.

TWENTY-FIVE YEARS AGO

At the last meeting of the Kansas City Mental Hygiene Society Dr. B. Landis Elliott was elected president. He succeeds Dr. G. Wilse Robinson, Jr. who has served as president for the last five years. Dr. Marvin L. Bills was elected vice president.

Dr. C. C. Little, New York, managing director of the American Society for the Control of Cancer, was the guest speaker at a dinner given by Dr. Ellis Fischel, St. Louis, March 13. Dr. Little discussed his experiments on mice which he has been conducting for twenty-seven years. Approximately 30,000 mice are kept on hand at the Jackson Memorial Laboratory at Bar Harbor, Maine. Some of the mice are of the hundredth generation. Dr. Little brought out much data on cancer obtained in his experimental work.

TEN YEARS AGO

The 93rd Annual Session of the Association promises to be as successful as the Centennial Session held in 1950. The omission of sessions during the Civil War and in 1945 during World War II made the one hundredth anniversary of the Association coincide with the 92nd Annual Session. Color television was used at the session, the first showing of color television in Kansas City. C. Edgar Virden, M.D., Kansas City, was installed at the Annual Banquet at which W. A. Bloom, M.D., Fayette, presided. The speaker at the banquet was Melvin A. Casberg, M.D., St. Louis, Dean, St. Louis University School of Medicine.

The population of the United States is six and one half times that of a century ago, having increased from 23,000,000 in 1850 to 151,000,000 in 1950, according to the Statistical Bulletin of the Metropolitan Life Insurance Company. The population has doubled in the last 50 years.

Elmer L. Henderson, M.D., Louisville, Ky., President of the American Medical Association, has been elected president of the American Medical Education Foundation.

The cigarette that made the Filter Famous!

20
CIGARETTES
CLASS 'A'
KENT
CIGARETTES
NEW
EXCLUSIVE MICRONITE FILTER
KING SIZE

It's true. Kent's enormous rise in popularity—with all the attendant magazine and newspaper stories—really put momentum to the trend toward filter cigarettes!

So, Kent is the cigarette that made the filter famous. And no wonder. Kent's famous Micronite filter is made from a pure, all-vegetable material. A specially designed process at the P. Lorillard factory compresses this material into the filter shape and creates an intricate network of tiny channels which refine smoking flavor.

Kent with the Micronite filter refines away harsh flavor . . . refines away hot taste . . . makes the taste of a cigarette mild.

That's why you'll feel better about smoking with the taste of Kent.

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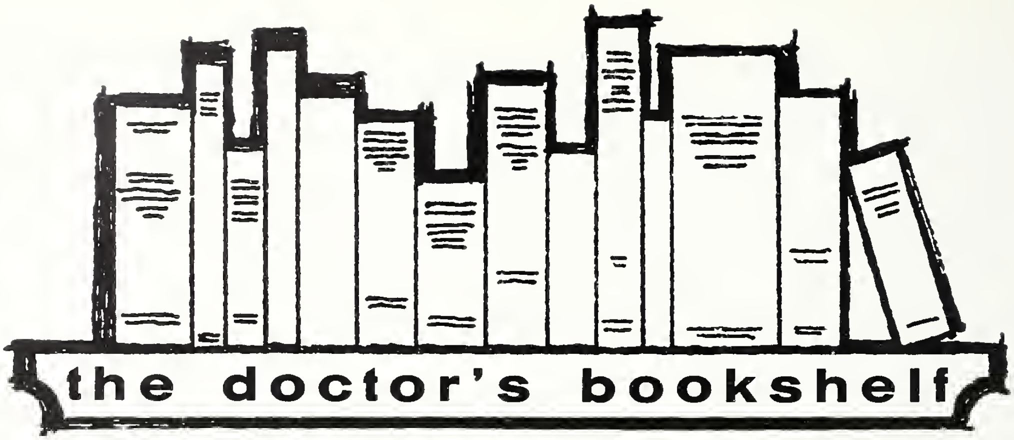
A PRODUCT OF P. LORILLARD COMPANY · FIRST WITH THE FINEST CIGARETTES · THROUGH LORILLARD RESEARCH



the doctor's bookshelf

BOOK REVIEW

Manual of Skin Diseases, by Gordon C. Sauer, M.D., Assistant Clinical Professor of Medicine (Dermatology) and Chief of the Section of Dermatology, University of Kansas School of Medicine; Attending Physician, General Hospital, Kansas City, Mo.; Consultant, U. S. Army Hospital, Fort Leavenworth, Kansas. J. B. Lippincott Company, Philadelphia & Montreal, 1959. Price: $9.75.

This book, written by a member of the Jackson County Medical Society, fills a need in dermatology just as the author intended: namely, to present the commoner diseases of the skin in such a fashion that the student and general practitioner can often diagnose and treat such conditions through ready reference.

Dr. Sauer planned to make the descriptions of the commoner skin diseases brief, and yet to the point, so that they would contain the important diagnostic criteria, both clinical and necessary laboratory tests. However, no good dermatological text could be complete without a considerable number of photographs and diagrammatic sketches. This has been accomplished, especially by making use of 28 color plates through the courtesy of several pharmaceutical companies, and 151 black and white illustrations. No dermatological text, other than an atlas, has as many color plates—due to the involved expense. Because detail in photographs of dermatological conditions is paramount, the author has made it a point to include close-up pictures as much as possible, and especially in commonly found sites of the body for the particular disease. Diagrammatic sketches of the most frequent body locations of some of the most commonly encountered skin diseases are presented, and photographs accompany some of the sketches to add clarity. These should be quite helpful to the general practitioner and the medical student.

The book, whis is printed on heavy glossy paper, has each page divided into two vertical columns which makes for more rapid reading, and allows for more compactness when descriptions are terse, as they often are in this meaty text. This division of pages is helpful when prescriptions are presented, which Dr. Sauer has done rather frequently, and when especially indicated. Treatment is as up to date as any textbook can be, as for instance the dosages for Griseofulvin where indicated in certain types of superficial fungus infections. Prescriptions are all written in the metric system, indicative of the modern trend in dermatology.

There are 27 chapters, and a dictionary-index in the last portion of the book. This latter feature is unique, in that not only are some of the terms used only in dermatology defined, but also some of the more unusual skin diseases are described briefly in one or several sentences. Of course, a large dermatological text would have to be consulted for detailed descriptions of rare diseases but that is beyond the intended scope of any manual of dermatology.

The 27 chapters contain several unusual ideas. One is "Your Introduction to the Patient," told as if the author were examining a patient, so that a medical student could learn how to properly approach a skin problem. Another is "Dermatologic Diagnosis." This includes primary and secondary lesions, diagnosis by location, seasonal skin diseases, pediatric skin disorders, senile skin diseases, military dermatoses and dermatoses of Negroes. A page on "Therapy Pearls" gives some sound advice that every well trained dermatologist puts into his daily practice. The chapter on "Syphilis" is worthwhile and up to date, and the photographs are excellent. Since this disease seems to be gaining a foothold again, today's medical student must become familiar with its protean manifestations. The chapter on "Geographical Skin Diseases in North America" is also unique and should be useful. This includes a map of the United States with labeling of various areas of the country where certain skin conditions are observed most frequently, if not exclusively. The final chapter on "Basic Dermatologic Equipment" is helpful, mainly because this equipment is photographed and labeled to give clarity.

This manual can be highly recommended for anyone treating diseases of the skin. D.B.M.

BOOKS RECEIVED

PHARMACOLOGY, THE NATURE, ACTION AND USE OF DRUGS, by Harry Beckman, M.D., Chairman, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; Consulting Physician, Milwaukee County General Hospital and Columbia Hospital; Editor, Year Book of Drug Therapy. Second Edition, W. B. Saunders Company, Philadelphia & London, 1961. Price: $15.50.

THE HAND, A MANUAL AND ATLAS FOR THE GENERAL SURGEON, by Henry C. Marble, M.D., Consulting Surgeon to the Massachusetts General Hospital. W. B. Saunders Company, Philadelphia and London, 1960. Price: $7.00.

STROKE, A STUDY OF RECOVERY, by Douglas Ritchie. Doubleday & Company, Inc., Garden City, New York, 1961. Price: $3.50.

BELOVED PROFESSOR, LIFE AND TIMES OF WILLIAM DODGE FROST, by Russell E. Frost. Vantage Press, New York, Washington, Hollywood, 1961. Price: $3.75.

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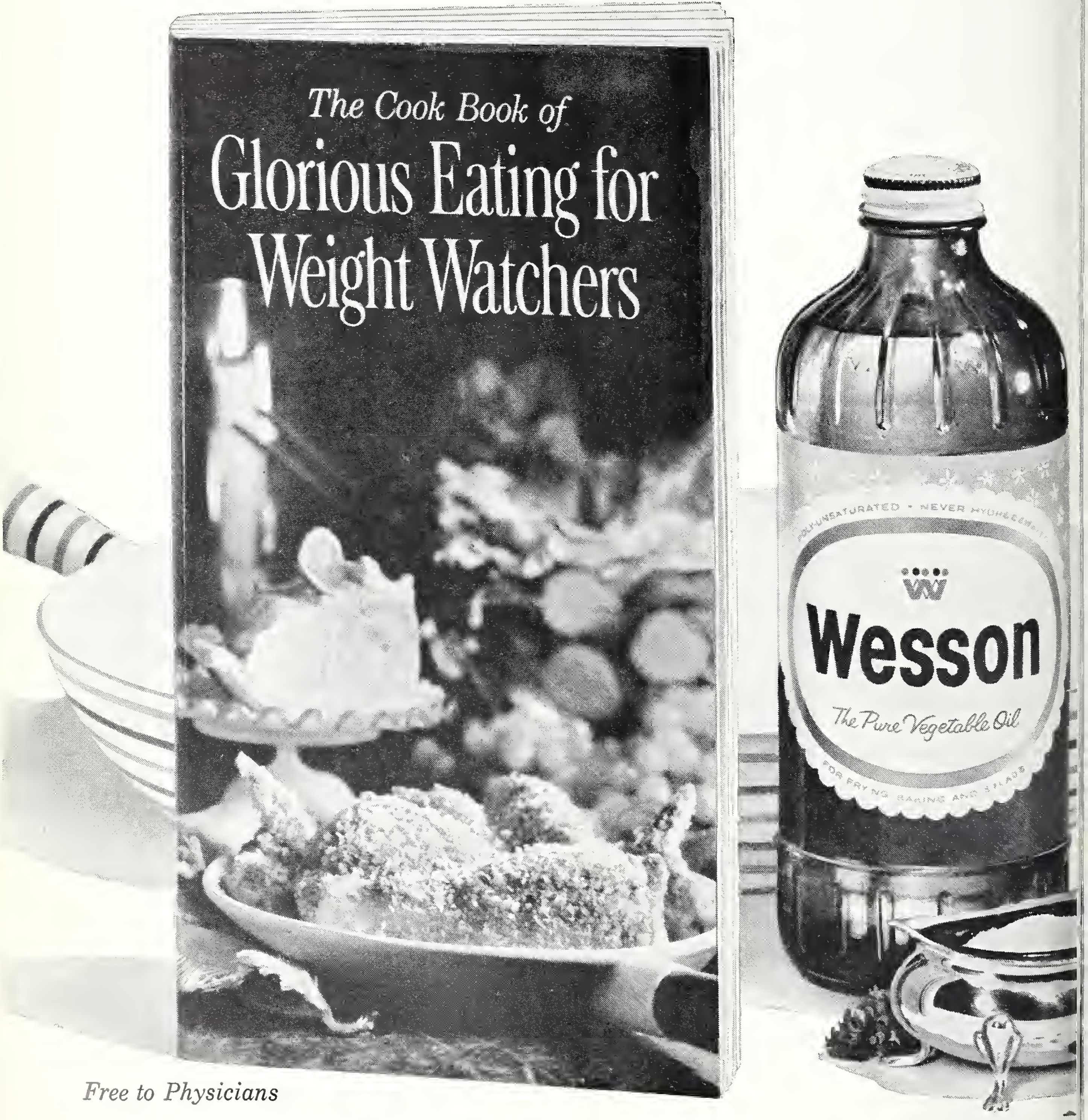
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Curiosa et Trivia

WILLIAM B. McCUNNIFF

The worst pollution point on a major U. S. river is at Kansas City. The wastes poured into the Missouri River, in terms of oxygen needed to break them down, is the equivalent of a population of 1,500,000.

It's up to you if you want to consider the phase of the moon as part of your preoperative preparation. But a Florida physician reports a preponderance of tonsil bleeders near the time of the full moon, and only an insignificant number at the new moon.

About one third of all infants dying between one month and two years of age show no sufficient postmortem pathology to account for their death.

Over a hundred years ago, it was suggested in Colombia that the government sell iodized salt to prevent endemic goiter. Legislation introduced in our United States fairly regularly since 1936 has consistently failed to make iodization of salt mandatory.

Capsule Clinics

- Ultrasonic therapy is an effective and painless method for treating plantar warts. One disadvantage, however, is the number of weekly treatments required (15 or more). Rowe, R. J., and Gray, J. M., Arch. Dermatol. **82**:1008, 1960.
- Pruritus incident to the use of orthopedic devices was completely relieved in 88 per cent of patients given trimeprazine in daily doses of 2.5 to 25 mg. Bell, B. T. et al. J.A.M.A. **174**:1976, 1960.
- Scopolamine is the drug of choice in post anesthetic vomiting. Of all drugs tested it most closely fulfills the criteria for the still undiscovered specific antiemetic. Greene, B. A., et al. New York State J.M. **61**:102, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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TOM R. O'BRIEN

[illegible]

H. B. 690. Kerr-Mills Implementation

Legislation to implement the Kerr-Mills law was introduced in the Missouri legislature on April 4 in the form of H. B. 690. The bill, an enabling act, would permit the state to expand its present program to cover all necessary health services for those on Old Age Assistance rolls, and extend similar benefits to the near-needy groups over the age of 65.

The bill was sponsored by Reps. J. J. Wimp, M.D. (D), Adair County; R. J. King, Jr. (R), St. Louis County; Luke A. Knese, M.D. (D), St. Louis; Dorman L. Steelman (R), Dent County; John F. Baber, D.D.S. (D), Ray County, and William C. Phelps (R), Jackson County.

The Kerr-Mills law, PL 86-788, was enacted by Congress toward the end of the last session. It provides increased federal funds to assist states to expand and improve their programs for health care benefits for the aged.

The law had three principal effects in Missouri. First, it automatically increased the federal contribution to the state's health care program for those receiving Old Age Assistance by 15 per cent. This provision took effect in October 1960 and provided an increase in funds available for the program of about $97,000 a year. Second, the Kerr-Mills law makes additional matching federal funds available for expansion of Missouri's present program. Under the law's formula, the federal government will pay about 68 per cent of the cost of the benefits paid for health care of Old Age Assistance recipients in the state, up to a total of $12 per recipient per month.

Finally, the law makes it possible for the state to establish a program of medical assistance for the near-needy aged—those over age 65 who do not qualify for Old Age Assistance, but who find it difficult to provide for the full cost of health care. The federal contribution for this portion of the program would be about 53 per cent of the cost of benefits paid.

The federal government also pays one half the cost of administering the health care program.

The present health care assistance program in Missouri provides for benefits for in-patient hospital care, up to 14 days per confinement, for Old Age Assistance recipients hospitalized for medical emergencies or acute serious illness. It also provides for increased assistance for totally bedridden elderly patients in nursing homes or at home, up to $100 per month.

Specifically, H. B. 690 makes possible the payment of benefits for hospital in-patient and outpatient care, clinic services, nursing home care, services of physicians and dentists, private duty nursing, diagnostic and screening procedures, preventive care, physical therapy and related services, home care services, prescription drugs, eyeglasses, dentures and prosthetic devices for those receiving Old Age Assistance.

In addition, persons over age 65 who are not eligible for welfare aid, but who are medically indigent and unable to pay the full costs of their health care, would qualify for similar benefits after incurring $100 in health care over any 12 consecutive month period. In general, the bill provides that single persons over 65 with incomes of less than $2,000, and married couples over 65 with incomes of less than $2,500 a year, would be eligible under this phase of the program.

Other Legislation of Interest

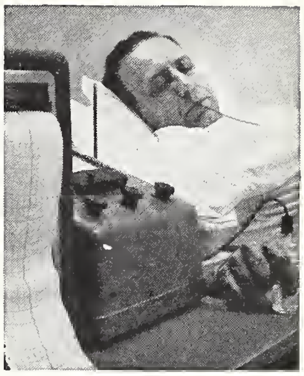
H. B. 633. Kerr-Mills Implementation. This act, similar in intent to H. B. 690, would accomplish implementation in a different fashion. It was introduced by Reps. Earl A. Bollinger of Madison County.

S. B. 359. Optometry. This act completely revises the present optometry laws. The definition, as proposed, encroaches on the practice of medicine and amendments were scheduled to be offered to change the definition at a hearing, held April 18, before the Senate Committee on Public Health and Welfare.

H. B. 133. Chiropractic. This act passed the House on March 23 by a majority of three votes, receiving 82 whereas 79 votes were required for final passage. The bill has been assigned to the Senate Committee on Public Health and Welfare. Efforts will be made to amend the bill in the Senate to strike out the objectionable language now contained in the act.

H. B. 157. Competency of Minor. This act passed by the House, now pending in the Senate Committee on Public Health and Welfare, provides that any married minor and any minor parent shall be considered to be an adult for the purpose of consenting to medical and surgical care for himself, his spouse or his child.

At the site of peptic ulcer



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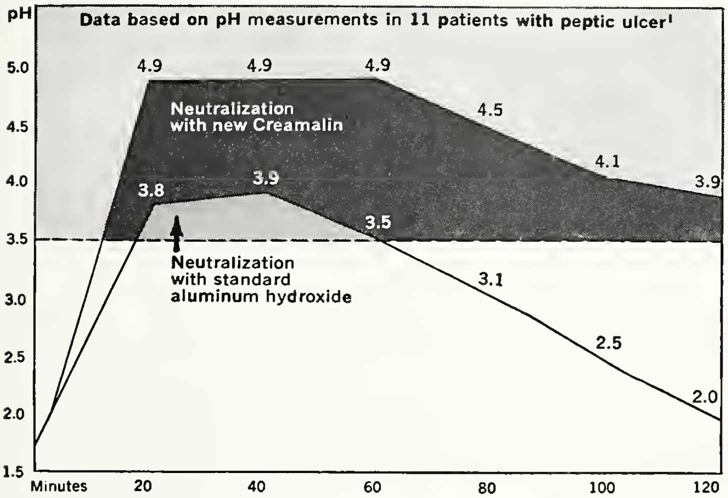

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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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Across
Missouri

Summary of Actions by the 1961 House of Delegates

Proceedings of the House of Delegates of the Missouri State Medical Association of the 103rd Annual Session will be published in the July issue of Missouri Medicine.

That members may know of the general actions of the House prior to that time, a brief summary was sent to societies which have publications and the summary is reprinted so that members who do not have access to county society publications can review the actions.

Action on the Kerr-Mills act was adopted as stated in the resolution: "Resolved, That the House of Delegates endorses the principles of the Kerr-Mills act and recommends that the act be fully implemented by the Legislature of Missouri to such degree as may appear necessary and in the order of need."

A resolution presented by the Greene County Medical Society toward furtherance of the public service committee work was adopted stressing that "individual doctors" must "afford the time" and "give the interest and the effort on which the success of such programs must ultimately depend" and recommending that thought and care be exercised in the use of the word "guarantee." The resolution further pointed out that there were many phases that resulted in favorable publicity without a great cash outlay.

Another resolution presented by Jackson County Medical Society dealing with the public service committee work and suggesting modification of the work but further implementation in reaching doctors personally through increased personnel was passed.

A resolution presented by a St. Louis delegate recommending that the legislature move as speedily as possible to provide funds required for progress in the field of mental health and to enact enabling legislation that may be necessary for implementation of the mental health program was adopted.

A recommended amendment to the Constitution establishing St. Louis County as a separate Councilor District was approved and laid on the table for the necessary year.

An amendment to the By-laws was adopted establishing a Committee on Radiology and Ionizing Radiation.

Resolutions were adopted complimenting the Greater Kansas City Health Fair; toward arranging of better emergency medical care at the scene of accidents; furnishing factual material on aging health plans to legislators; confidentiality statutes for certain medical records; the polling of Missouri State Medical Association membership on the amount of care given without charge to be sent to the state legislature; the regulation of the speed of ambulances and other casualty carrying vehicles; instructing the study of the feasibility of a state hospital accreditation board by an appropriate committee; recommending study by a committee of the pharmacy code; agreeing in principle with legislation on immunization being sponsored by the Junior Chamber of Commerce with modifications; complimenting Oscar P. Hampton, M.D., University City, for his work as Speaker of the House of Delegates for the last three years.

J. H. Summers, M.D., Lebanon, was installed as President.

Officers Elected

Officers elected were: President-Elect, Donald M. Dowell, M.D., Chillicothe; Vice Presidents, Claude W. Cooper, M.D., Thayer, Benjamin N. Jolly, M.D., Mexico, David N. Kerr, M.D., St. Louis; Secretary, John I. Matthews, M.D., Jefferson City; Treasurer, Charles R. Doyle, M.D., St. Louis; Speaker of the House, William C. Mixson, M.D., Kansas City; Vice Speaker of the House, Stanley S. Peterson, M.D., Springfield; Delegates to the American Medical Association, A. W. Neilson, M.D., St. Louis, and Richard H. Kiene, M.D., Kansas City; Alternates, Robert Kelley, M.D., St. Louis, and Rolla B. Wray, M.D., Nevada.

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University of Kansas School of Medicine
Kansas City, Kansas

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Associate Professor of Medicine
Washington University School of Medicine
St. Louis, Missouri

John M. Howard, M.D.
Professor of Surgery
Hahnemann Medical College
Philadelphia, Pennsylvania

Dwight J. Ingle, M.D.
Professor of Physiology
University of Chicago
Chicago, Illinois

Vincent C. Kelley, M.D.
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University of Washington School of Medicine
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Associate Professor of Pediatrics

Norman D. Asel, M.D.
Associate Professor of Medicine (Dermatology)

Thomas W. Burns, M.D.
Associate Professor of Medicine

John M. Franz, Ph.D.
Assistant Professor of Biochemistry

C. Thorpe Ray, M.D.
Professor of Medicine

PROGRAM

Thursday, May 11

9:00-12:00 a.m. Panel—"Basic Principles Involved in Steroid Therapy. Biochemical, Pharmacological and Endocrinological Aspects"
Moderator: Thomas W. Burns, M.D.
John M. Franz, Ph.D.
Dwight J. Ingle, M.D.
Vincent C. Kelley, M.D.
Theodore B. Schwartz, M.D.

10:30 Coffee Break

12:00 Lunch—University of Missouri Medical Center Cafeteria

2:00- 2:45 p.m. "Steroid Therapy in Children"
Theodore C. Panos, M.D.

2:45- 3:30 "Steroid Therapy in Hematologic Diseases"
William J. Harrington, M.D.

3:30- 4:45 "Steroid Therapy in Dermatologic Diseases"
Norman D. Asel, M.D.

Friday, May 12

9:00-11:00 a.m. Panel—"Steroid Therapy During Pregnancy and Early Infancy"
Moderator: Constantine A. Anast, M.D.
Kermit E. Krantz, M.D.
Theodore C. Panos, M.D.
James C. Warren, M.D.

11:15-12:00 "Steroid Therapy in Surgery"
John M. Howard, M.D.

2:00- 4:30 p.m. Panel—"Steroid Therapy in Collagen Diseases"
Moderator: C. Thorpe Ray, M.D.
Tom R. Hamilton, M.D.
Vincent C. Kelley, M.D.
Theodore B. Schwartz, M.D.

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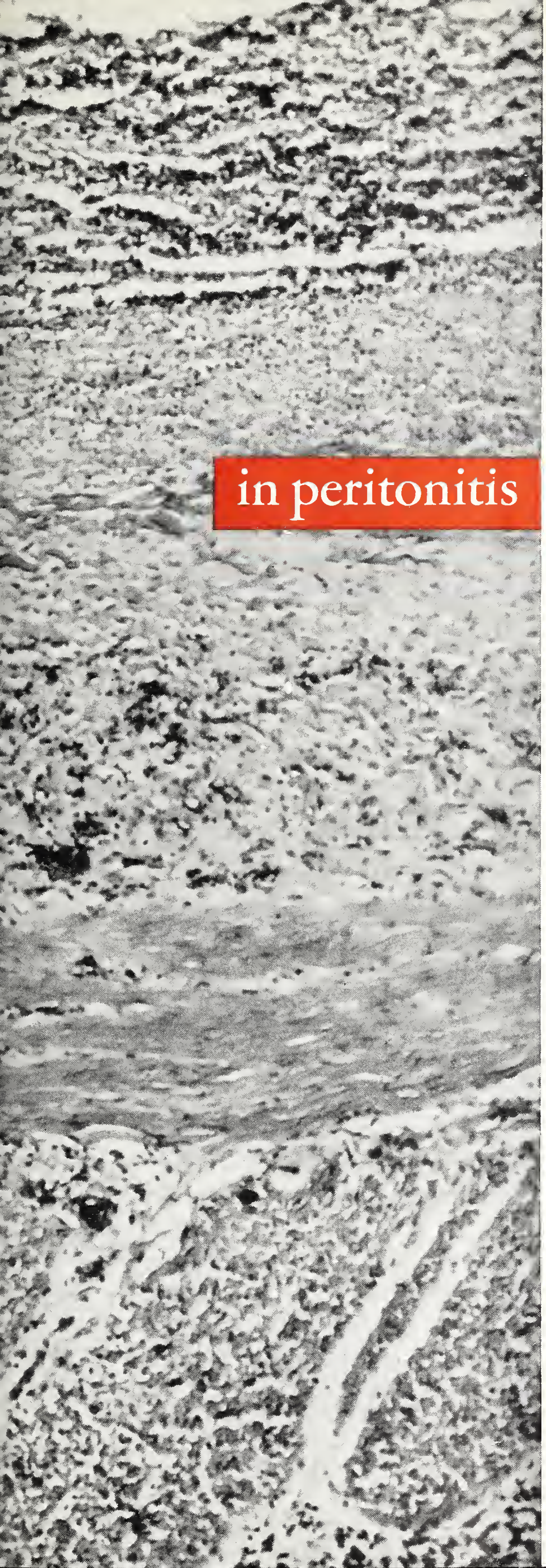
Caution: Since the use of any antibiotic may result in overgrowth of nonsusceptible organisms, constant observation of the patient is essential. If new infections appear during therapy, appropriate measures should be taken.

As with any serious infection, therapy of peritonitis with Panalba or other antibacterial agents is adjunctive to surgical procedures and supportive therapy.



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The Division of Health of Missouri

Immunization Levels in Three Missouri Areas as Measured by a Sampling Technic

Two methods of measuring immunization levels in Missouri have been devised and used within the last two years. One technic is that of securing an immunization history from the parents of first grade children and tabulating the results in terms of the ages at which the children received various immunizations. It is thus a retrospective method, and the results pertaining to immunization in infancy will reflect the situation as of five or six years prior to the time of the survey. This method was used in the rural surveys reported in MISSOURI MEDICINE (**54**:420, April, 1960). The survey findings in eleven counties representing all sections of rural Missouri were remarkably similar and indicated that:

1. Approximately 10 per cent of the children were vaccinated for smallpox in infancy and 50 per cent were vaccinated on attainment of school age.
2. Approximately 30 per cent of the children had completed diphtheria-tetanus-pertussis immunization in infancy and 70 per cent by the time they reached school age.
3. The percentage of first grade children who had received three or more injections of poliomyelitis vaccine was approximately 70 per cent. (The survey technic did not permit measurements of poliomyelitis immunization in infancy.)

PURPOSE

The purpose of this additional report is to present the technic and results of immunization surveys carried out in 1959 in Jefferson County, Kansas City and St. Louis County. These surveys were made by personnel of the health departments in the respective jurisdictions, with consultation and assistance from the Division of Health and the Public Health Service. The primary purpose of these three surveys was to measure the degree of poliomyelitis immunization, but immunizations for smallpox and D.P.T. were included for children under age 6. This was done to permit rough comparisons with levels of immunization for these diseases among preschool children in rural areas.

SURVEY TECHNIC

The survey technic used in Jefferson and St. Louis counties and in Kansas City involved personal interviews with a responsible person, or persons, in randomly selected households. The age and immunization status of each member of the household was recorded.

A local health officer is particularly interested in areas within his jurisdiction where immunization levels are relatively low so that he may pinpoint his remedial action. For this reason, survey areas were established within the city or county, the areas being differentiated on the basis of socioeconomic factors, or on the basis of availability of medical or public health services. Each survey area thus became an independent unit of study.

The number of households interviewed in each survey area was sufficient to insure a high degree of statistical significance. The selection of households for interview was thoroughly randomized, using a random number table, but the distribution of survey households within a survey area was approximately proportionate to the population density in various parts of the area.

Personnel of the respective local health departments served as the interviewers in these surveys, with some volunteer assistance in Jefferson County. With adequate statistical guidance, this technic could be used to measure other health indices.

The American Journal of Public Health and the Nations Health (**60**:1847, December, 1960) contains a more complete description of this survey method.

SUMMARY OF FINDINGS

A complete presentation of the detailed findings of the surveys in Jefferson County, Kansas City and St. Louis County would necessitate extensive tables, and their interpretation would require an intimate knowledge of the characteristics of the individual survey areas within the counties or city. However, a general picture of

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Reference: 1. Scal, J. C.: Eye Ear Nose & Throat Month. 38:738 (Sept.) 1959.

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APPROXIMATE LEVELS OF IMMUNIZATION OF CERTAIN AGE GROUPS IN JEFFERSON COUNTY, KANSAS CITY AND ST. LOUIS COUNTY—1959

City or County	PER CENT OF SURVEYED CHILDREN WITH								
	Initial Series D.P.T.			*Smallpox Vaccination*			*Three or More Polio Injections*		
	AGE GROUP	MEDIAN	RANGE	AGE GROUP	MEDIAN	RANGE	AGE GROUP	MEDIAN	RANGE
Jefferson County September, 1959 (4 areas)	Under 1 & 1	47	38-64	Under 1 & 1	16	12-25	1-4	49	40-55
	5 & 6	82	67-86	5 & 6	61	57-72	5-9	80	71-85
Kansas City June, 1959 (5 areas)	Under 1 & 1	56	21-58	Under 1 & 1	33	16-44	0-4	34	15-64
	5 & 6	88	62-100	5 & 6	74	57-90	5-14	73	45-95
St. Louis County August, 1959 (9 areas)	Under 1	67	43-80	Under 1	27	14-50	1-4	67	49-100
	5	89	75-100	5	88	73-100	5-9	83	53-100

the immunization levels among young children in these three jurisdictions may be gleaned from the accompanying table.

In general, but not invariably, the results of these three surveys indicate that immunization levels increase with rising socioeconomic conditions, that there are wide variations in the proportion of adequately immunized children within a single city or county, that smallpox vaccination lags behind other immunizations and that infants and preschool children are less well protected than school age children.

It is apparent that there are still population "pockets" in enlightened society where preventable diseases may occur in epidemic form. This is particularly true of poliomyelitis. Greater emphasis must be placed on immunization of infants and of those segments of the population not now being reached by medical and public health services.

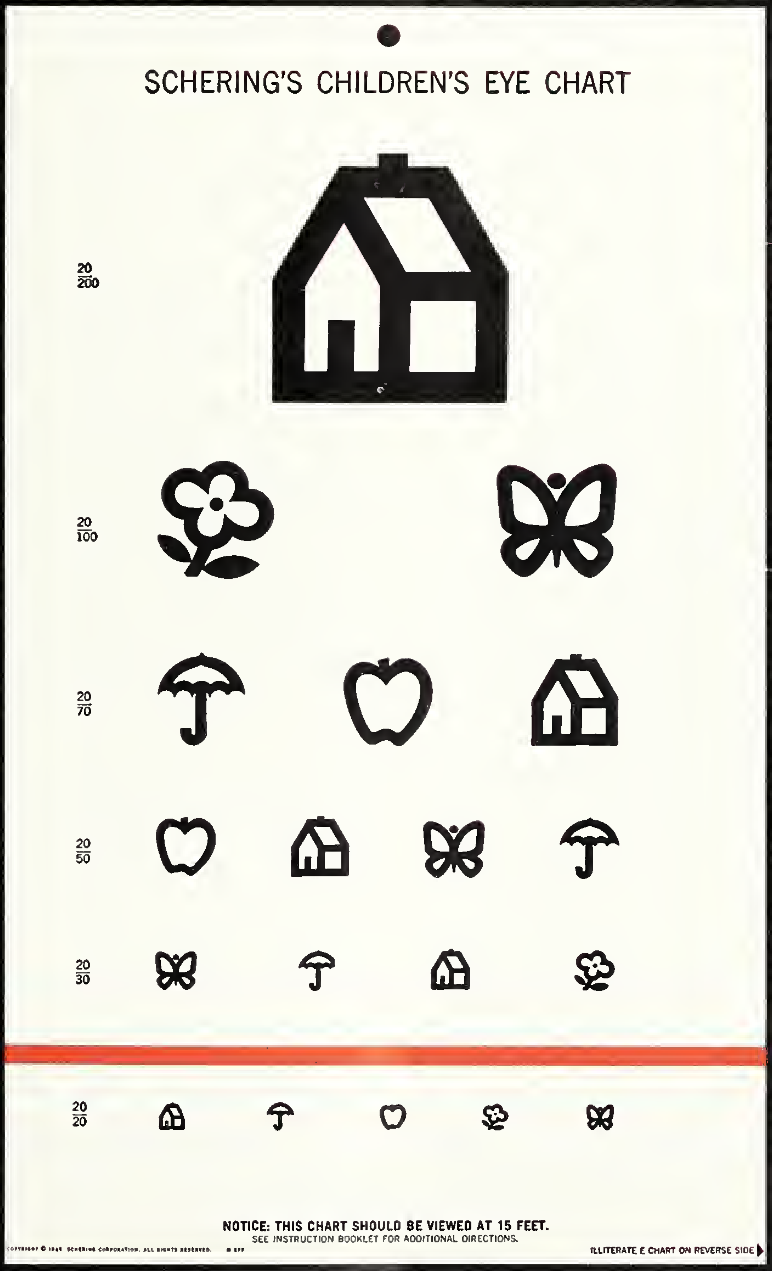
before *they* learn their letters...
you can learn how well they see

Schering

This chart devised by Schering is part of a simple vision screening test for children over 3 years. Used with the special lens provided, it helps you detect impaired vision, including latent hyperopia (farsightedness), and thus facilitates screening of children in need of referral to an ophthalmologist. *The complete kit—eye chart, special lens and instructions for use—is available without charge from your Schering representative or on written request.*

Topical eye preparations: **METIMYD®** Ophthalmic Suspension (prednisolone acetate and sulfacetamide sodium) • Ointment with Neomycin; **METRETON®** Ophthalmic Suspension (prednisolone acetate and chlorpheniramine gluconate); **Sodium SULAMYD®** Ophthalmic Solution (sulfacetamide sodium), 30% and 10% • Ophthalmic Ointment, 10%. SCHERING CORPORATION (Dept. F.) • BLOOMFIELD, NEW JERSEY

JANUARY, 1961 S-720


SCHERING'S CHILDREN'S EYE CHART
20/200
20/100
20/70
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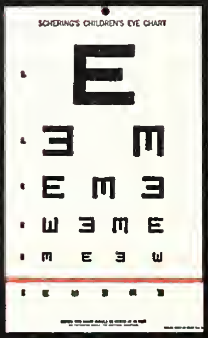
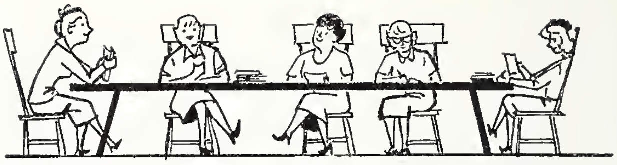
NOTICE: THIS CHART SHOULD BE VIEWED AT 15 FEET.
SEE INSTRUCTION BOOKLET FOR ADDITIONAL DIRECTIONS.
ILLITERATE E CHART ON REVERSE SIDE


SCHERING'S CHILDREN'S EYE CHART

Reverse side of
Schering Eye Chart

Woman's Auxiliary



May, the month of flowers, brings to all of us a reawakening to all the beauty that surrounds us. Somehow, the shy violet "peeping through the moss, half-hidden from the eye," typifies to all of us, how often both the beauty of nature and of human character is observed only by those who search for it.

Mrs. Frederick E. Wade

I know most of us have been busy planting seed in our garden, because we know with love and care, we will be rewarded with rainbows of beautiful blossoms. Our hard work to accomplish this miracle seems little in comparison to the great reward we receive.

In our Auxiliary this year, as in all years previous, our foremost objective will be to extend the aims and ideals of the medical profession. We are not the practitioners of medicine, but so often its interpreters. Our first priority is not public relations, but our personal relations within our group. Through working together in our common bond of friendship, fellowship and cooperation, we are then equal to meeting our greater test of presenting ourselves to others in such a manner as to bring honor to every doctor's wife in Missouri. I think our recent convention is a perfect example of 1,718 members completely united in achieving our common goal. Many of you were present, and we missed those who could not be with us, but the splendid record of achievement this past year, under the Presidency of Ruth Kelling, reflected the ideas, service and work of every one of our members throughout the state.

I am so thankful for the wonderful group of officers and committee chairmen I have to work with this year. With such a capable copilot as Mrs. J. Martyn Schattyn as president-elect; and our four vice-presidents, Mrs. Harry Harkness, Mrs. J. S. Summers, Jr., Mrs. Guy D. Callaway, Jr., and Mrs. Ralph Bohnsack; our recording secretary, Mrs. Harold H. Feller; our treasurer, Mrs. Lawrence S. Crispell; our auditor, Mrs. William R. Rost; our corresponding secretary, Mrs. Carl Ferris, and our parliamentarian, Mrs. Henry C. Bauman, I feel confident that our Auxiliary will have a successful year. My heartfelt thanks to these wonderful women and all our committee chairmen who will be the ones to direct our "ship of state" this year.

We have one new committee added to our list, that of Rural Health, and Mrs. Norman Asel, Columbia, will pioneer our work in this new program. All of our committee chairmen are outstanding women, and eager to be of assistance to Auxiliary members throughout the state. They are eager to have your ideas, as well as to give you guidance wherever possible.

Our husbands are in a profession that seems to attract a great army of critics. Like former President Harry Truman, we resent unjustified criticism of our loved ones. However, we know the record will not be set straight by writing angry letters, no matter how justified they might be.

What can our answer be in combating criticism? Let us not look forward to "silencing" our critics, but rather to educating them. Through our work in Auxiliary we can do this. It is unfortunate that some people judge American Medicine on the debating and public speaking ability of its physicians rather than on their scientific training and knowledge. It would seem just as logical to reverse the procedure and judge Walter Reuther's ability as a union leader on his ability to perform a delicate surgical procedure.

Through educating ourselves on the real issues confronting American medicine we can become better interpreters in our own communities, and thereby sow the seed for a true understanding of the issues involved. We all know that the American supremacy in the medical field rests on the personal relationship between doctor and patient. So the preservation of this excellency rests, in part, upon the individual interpretation of it, by each Auxiliary member in her home community.

So, now that May is here, let us plant not only seeds in the ground, but thoughts and ideals in the minds of others—and look forward to a rich harvest.

Volume 58, Number 5—May, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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THEODORE E. KEATS, M.D., *Columbia*

Cysticercosis

A Demonstration of Its Roentgen Manifestations

The roentgen manifestations of cysticercosis are pathognomonic of this disease. The case of a patient with an unusually heavy infestation is presented to illustrate these findings.

Dr. Keats is Professor of Radiology at the University of Missouri School of Medicine.

The roentgen evidences of cysticercosis are striking and when present are pathognomonic of this disease. The rarity of this condition in this country has promoted this report of experience with a patient with an unusually heavy infestation.

Cysticercosis is due to the presence of the cysticerci of the pork tapeworm (Taenia solium) in the tissues of man. This tapeworm has a world-wide distribution and is seen wherever raw or inadequately cooked pork is eaten. Infection is rare in England, Canada and the United States.[1]

The adult pork tapeworm lives attached to the intestinal wall of man. Ova are passed in the stool and on reaching the soil remain viable for weeks and, when ingested by hogs or man, hatch immediately. The liberated oncosphere penetrates the intestinal wall and reaches the lymphatic or circulatory system. These embryos are distributed throughout the body, most localizing in the musculature or subcutaneous tissues. Within 60 to 70 days they become metamorphosed into infective bladder worms, or cysticercus cellulose, which measure about 5 mm in length by 8 to 10 mm in breadth.

In the usual course of events, cysticerci reach man when he ingests raw or inadequately prepared pork. The larvae are digested out of the cysts, become attached to the intestinal wall and grow into maturity in 5 to 12 weeks.

Man serves as the definitive host of the pork tapeworm and the hog is intermediate host. However, in cysticercosis man may serve as the intermediate host as well, with the larval stages, cysticerci, present in his tissues. This form of the disease results from the ingestion and subsequent hatching of viable ova in food or drink contaminated by feces from a person harboring the adult worm. Autoinfection may occur when ova are carried from feces to the mouth on the hands of infected persons.

The clinical picture of cysticercosis is extremely variable and depends upon the location and the number of cysticerci in the host. If the number is few and localized principally in the subcutaneous tissues, symptoms may be negligible. However, localization in the myocardium, spinal cord, eye or brain may result in serious consequences secondary to tumor formation. Epileptic seizures may occur and brain tumor is often simulated. Cysts may be palpable as nodules in the superficial tissues.

Definitive diagnosis depends upon roentgen demonstration of the characteristic calcific shad-

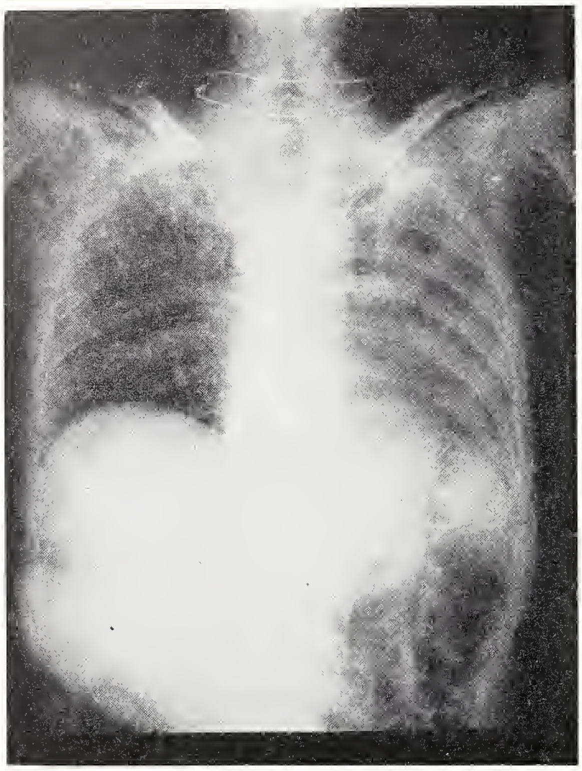

Fig. 1. Roentgenogram of the chest shows calcified cysticerci in the muscles of the chest wall, neck and arms. Osteolytic metastases are also evident.

ows or upon recovery of the larva by excision of a cyst and identification of species by its morphologic characteristics.

The patient reported here was a 68 year old woman of Greek nationality who had spent the previous 20 years of her life in China and Japan. Five years prior to observation she had a left radical mastectomy for carcinoma of the breast and at the time of my observation was in terminal condition, suffering from widespread metastatic carcinoma. The patient expired shortly thereafter. The finding of cysticercosis actually represents an incidental finding.

Radiographs of her chest, abdomen and lower extremities (figs. 1, 2, 3 and 4) showed innumerable oval calcific bodies in virtually all the visualized muscles. These showed the classic appearance of cysticerci. The diagnoses of cysticercosis and metastatic adenocarcinoma of the breast were confirmed by biopsy.

COMMENT

The cysticerci encapsulated in muscle may remain alive for several years. During this period they give little or no evidence of their presence. However, when they die, there is local tissue reaction from the evolution of toxic products by degeneration, and also pressure effects from the postmortem swelling of the cysts. During the stage when the small subcutaneous and intramuscular nodules are palpable the cysts are demonstrable radiographically.

After death of the cysticerci calcification commences. It is estimated that three years are required to produce sufficient calcification to be visible radiographically.[2]

Cysticerci, when calcified, have a characteristic appearance. They are dense, elliptical bodies, lying in the muscles with their long axes in the direction of the fibers. Morrison[3] distinguishes 25 different shapes that may be seen, but the most common is the elliptical, with one end more pointed.

The shadows vary in size, from small dots up to 25 mm. in length. The calcification is not usually homogenous. In some, the calcific crust is irregular and practically all have a central noncalcified area which may be seen as a circle in those cysts which are seen end-on. According to Brailsford[4] this clear area represents the scolex.

This description applies to the intramuscular shadows. Intracerebral cysts are seen as small

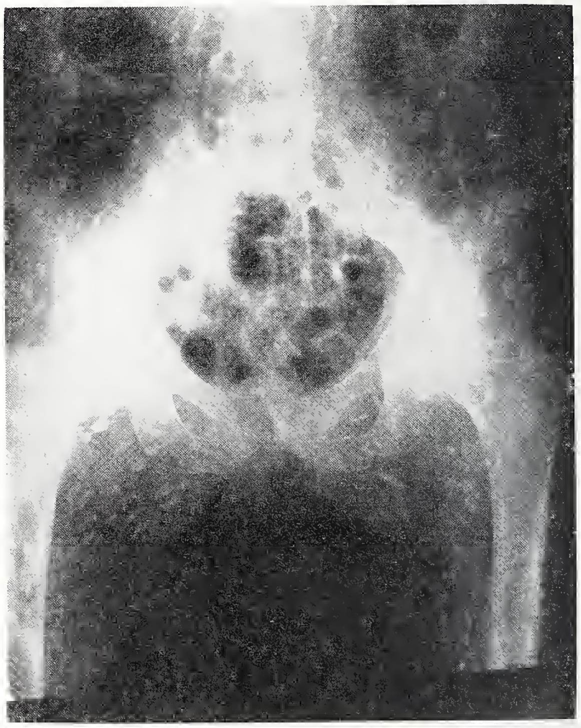

Fig. 2. Roentgenogram of the abdomen and pelvis shows multiple calcified cysticerci in the muscles of the thighs, abdomen and gluteal regions.

round opacities a few millimeters in diameter. These calcifications must be differentiated from calcified cysts in the superficial muscles.

Roentgen examination in suspected cases may require repetition over a period of years before positive radiologic evidence is obtained since the calcification of these cysts is a slow process.

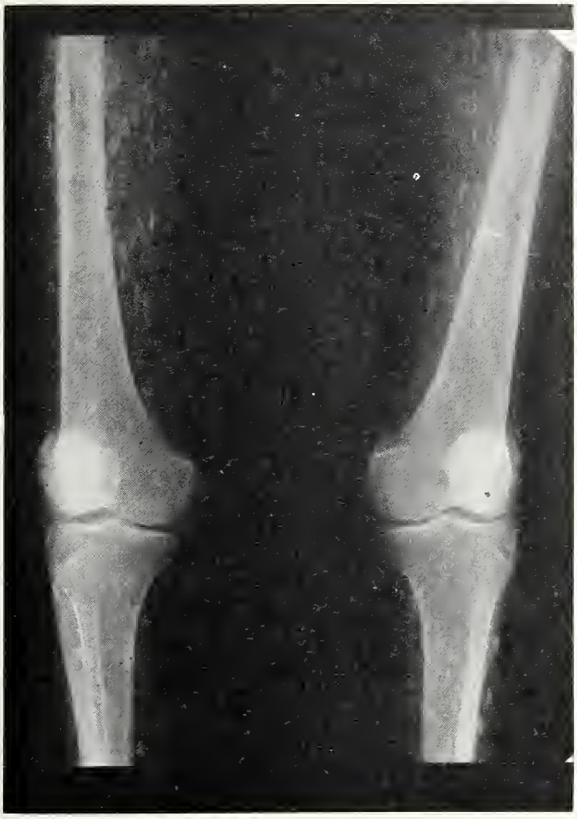

Fig. 3. Roentgenogram of the lower extremities shows cysticerci in the muscles of the thighs and legs.

This disease is preventable by proper cooking of all pork products. Government meat inspection provides a safeguard but not complete protection. Sanitary disposal of human feces prevents infection of the hog and is the essential procedure in control.

Cysticercosis may be prevented by prompt therapy of the individual harboring the adult worm, personal cleanliness to prevent autoinfection and protection of food and drink against possible contamination by human feces containing ova of T. solium.

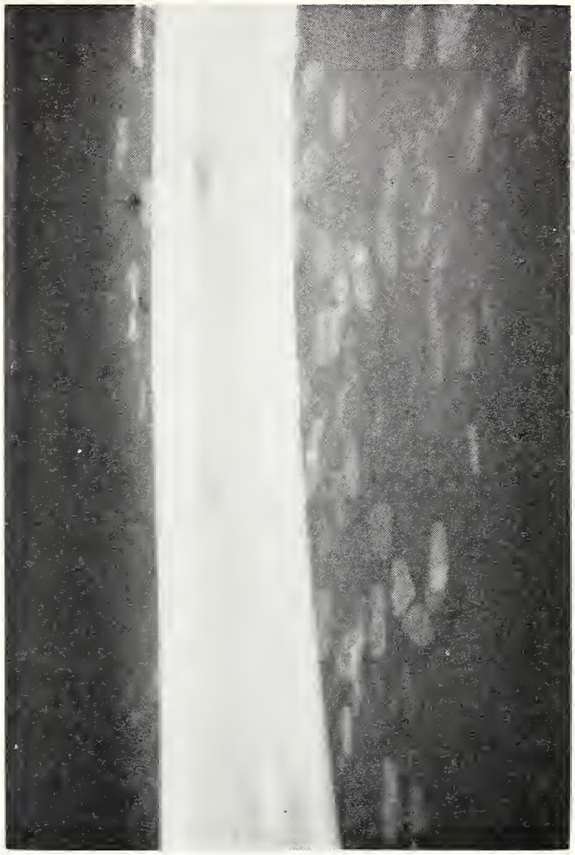

Fig. 4. Enlargement of section of figure 3 shows to better advantage the characteristics of the calcified cysticerci.

Summary

A case of Cysticercosis with striking roentgen manifestations has been presented. Demonstration of the characteristic calcified encapsulated cysticerci permits definitive diagnosis. The pathogenesis of this disease is discussed.

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E. R. PRICE, D.V.M.; D. C. BLENDEN, D.V.M.,
and* JOHN T. LOGUE, M.D., *Columbia

Rabies in Missouri 1950-1960

Rabies, the oldest known and most dreaded of all animal diseases transmissible to man, was brought to Missouri by early settlers. The rabies problem increased uncontrolled until 507 laboratory confirmed cases of animal rabies were reported to the Division of Health in 1951. At that time a statewide rabies educational program was started. Division of Health personnel have presented rabies lectures to civic and farm groups and have prepared pamphlets on rabies prophylaxis for physicians and on wildlife rabies for outdoors men. Radio and television programs and frequent newspaper releases have been used to enlighten the public about Missouri's rabies problems. The rabies control films furnished by the Division of Health have been seen by hundreds of thousands of Missourians in the last ten years.

While rabies was present in Missouri in early years, it was not until 1951 that it came to much attention. A review of the number of cases in Missouri, control measures that are being used, identification of the rabid animal and treatment are discussed.

Dr. Price is with the Division of Health of Missouri. Dr. Blenden is with the Department of Veterinary Medicine at the University of Missouri, and Dr. Logue is Clinical Assistant Professor of Medicine of the School of Medicine of the University of Missouri.

Certainly Missourians are concerned about rabies for six suspected rabid animal heads are submitted to the central laboratory of the Division of Health for every confirmed rabies case; however, the central laboratory receives only a small percentage of heads from animals dying of rabies. Losses of four, eight and, in one instance, 32 cattle dying of clinical rabies on a farm are not unusual. From such an epizootic the laboratory may receive one animal head for rabies diagnostic study. Because of the expense, the Division of Health discourages the submission of wild animals that have not been responsible for human or domestic animal exposure.

Canine rabies can be eradicated by the vaccination of 70 per cent of owned dogs and the destruction of all strays. Six rabies epizootics have occurred in St. Louis since 1921 when accurate rabies records were started. Mass vaccination of dogs was used for the first time during the 1951 epizootic bringing it under control rapidly. In surrounding areas in which mass vaccination was not used the rabies epizootic continued unchecked.[1] To rapidly control a wildlife rabies epizootic moderate reduction of the infected species by trapping is necessary. Nature will control a rabies epizootic in foxes and skunks in from three to five years, sparing only a few animals and exposing all other warm blooded animals to the dangers of the disease. In a rural area compulsory vaccination of dogs, destruction of stray dogs and controlled trapping will bring a rabies epizootic under control within 45 days. Sporatic cases may appear for as long as six months due to the variable incubation period of this disease. Cat rabies will automatically be controlled when the described rabies control program is carried out. Since bat rabies was identified in Missouri for the first time in 1960, new rabies control technics may become necessary.[2]

Certain phases of the rabies control educational program have progressed remarkably well. In 1951 440 of the 507 laboratory confirmed cases of rabies were in dogs and in 1959 only 65 of the 204 cases were in dogs. This decline resulted from the public's demand for rabies vaccination of dogs. The primary problem in rabies control is the lack of an adequate rabies control law. At present the county courts or local municipalities assume responsibility for rabies control. Most county courts are reluctant to take any action. Those who do usually limit their program to voluntary vaccination of dogs. Consequently, rabies was still reported from more than half of the counties in Missouri during 1959.

Until adequate rabies control laws are enacted rabies will remain a serious public health problem as well as a serious continuing economic problem to the livestock industry of Missouri. Cattle raisers have long recognized that livestock insurance is cheaper than immunizing the cattle herd with rabies vaccine.

Until rabies is completely eradicated, Missouri physicians will be continually faced with the challenge of accurate animal rabies diagnosis, and the hazards inherent in human rabies prevention. Often the physician gains valuable information from an animal bite victim's description of the biting animal.

Animal Rabies

Rabies is an acute fatal infectious encephalitis caused by a neurotropic virus. The incubation period varies from 10 days to one year, but most cases develop within 25 days of exposure.

In experimental rabies virus remains at the inoculation site for about four days. By the second day it can be demonstrated in the spinal nerves and by the fourth day it can be isolated from the central nervous system. There virus multiplies and then spreads along the peripheral nerves to the salivary glands where it multiplies and is secreted in the saliva.

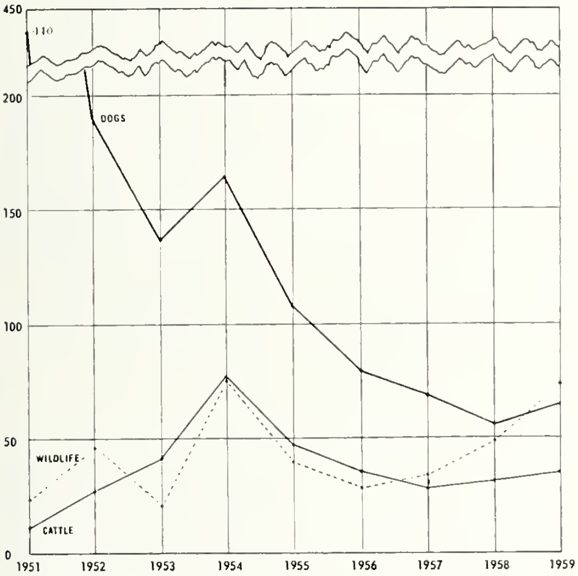


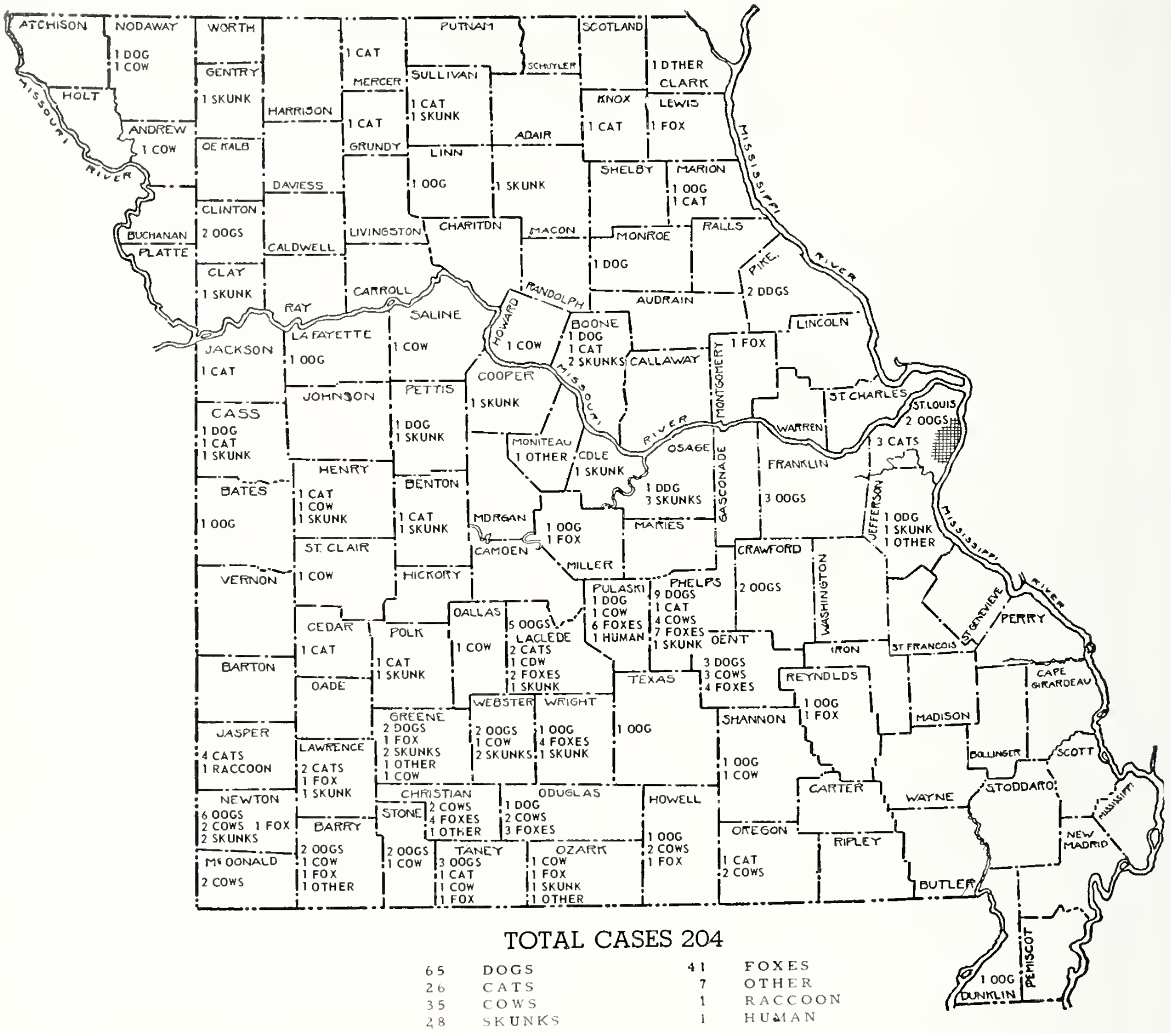
Fig. 1. Laboratory confirmed cases of rabies.

Rabies in dogs can be divided into four phases, the prodromal phase, the dumb phase, the furious phase and an atypical phase. The first sign observed in the prodromal phase of rabies is a distinct change in personality. The affectionate dog suddenly becomes vicious or the vicious or aggressive dog becomes melancholy or affectionate. Occasionally an intense pruritis develops at the site of inoculation of the virus causing intense scratching by the dog. The dog may become dull and listless with occasional periods of restlessness. Toward the end of the prodromal period which lasts about 36 hours, the dog's voice may become husky from partial paralysis of the vocal chords. Following the prodromal period, either dumb or furious rabies may develop. In dumb rabies progressive paralysis is apparent. Because of paralysis of the masseter and pharyngeal muscles the dog cannot close his mouth or swallow. For several days there is constant drooling of saliva, then the mucous membranes of the mouth and tongue become dry and leathery from salivary exhaustion and constant open mouth breathing. The animal may be friendly or indifferent. During this period many people are exposed to rabies while trying to remove a "bone" from the dog's throat. Dog's saliva contains rabies virus for about 24 hours before symptoms, so adequate precautions should be taken if exposure to saliva occurs. Within four days the dog becomes weaker, paralysis develops extending to vital organs and death ensues.

Furious rabies follows the same prodromal period that precedes dumb rabies. Increasing irritability and a desire to roam are the earliest symptoms of furious rabies. The dog soon loses all reasoning powers and will bite or viciously attack any moving object in his path. The furious dog is alert and aggressive; the dumb dog is friendly and stupid. If confined the furious dog will attack his cage, often breaking his teeth and lacerating his mouth and gums. Periods of stupor and hyperexcitability occur, then incoordination and generalized paralysis follow with death occurring within a few hours to three days. Emaciation from insufficient food intake and intense physical activity is characteristic.

The atypical phase of rabies is a mixture of both dumb and furious rabies following the usual prodromal phase. These dogs usually survive a day or two longer than those with furious rabies because of the lesser expenditure of energy and the slower progression of paralysis.[3]

Rabies in cattle is not characterized by the well defined phases seen in canine rabies. During the prodromal period of bovine rabies which may last for several days, there are no objective signs suggestive of rabies. The early symptoms are usually those of gastrointestinal disturbance, occasionally with a slight temperature rise. During this period, most human exposures occur while the animal is being handled by the owner or being examined by a veterinarian. In cattle rabies virus may be present in the saliva for five days before symptoms occur. After the prodromal period the course of bovine rabies is inconstant. Paralysis with death occurring in a few days may occur or a furious phase with a pronounced change in behavior may develop. The animal may become vicious and attack moving objects.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1 DOG
1 COW
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ANDREW
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MERCER
PUTNAM
SULLIVAN
1 CAT
1 SKUNK
1 CAT
GRUNDY
SCHUYLER
SCOTLAND
1 OTHER
CLARK
KNOX
1 CAT
LEWIS
1 FOX
ADAIR
LINN
1 DOG
1 SKUNK
MISSOURI RIVER
DAVIESS
CLINTON
2 DOGS
BUCHANAN
PLATTE
CALDWELL
LIVINGSTON
CHARITON
MACON
SHELBY
MARION
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HOWARD
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1 FOX
MILLER
MARIES
JEFFERSON
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1 OTHER
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2 DOGS
WASHINGTON
ST. CLAIR
1 COW
VERNON
HICKORY
PULASKI
1 DOG
1 COW
6 FOXES
1 HUMAN
PHELPS
9 DOGS
1 CAT
4 COWS
7 FOXES
1 SKUNK
MISSISSIPPI RIVER
ST GENEVIEVE
PERRY
CEDAR
1 CAT
POLK
1 CAT
1 SKUNK
DALLAS
1 COW
5 DOGS
LACLEDE
2 CATS
1 COW
2 FOXES
1 SKUNK
DENT
3 DOGS
3 COWS
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IRON
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BARTON
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REYNOLDS
1 DOG
1 FOX
CAPE GIRARDEAU
WEBSTER
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1 COW
2 SKUNKS
WRIGHT
1 DOG
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1 SKUNK
1 DOG
SHANNON
MADISON
JASPER
4 CATS
1 RACCOON
LAWRENCE
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1 FOX
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GREENE
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CARTER
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STODDARD
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1 COW
1 FOX
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McDONALD
2 COWS
2 DOGS
1 COW
TANEY
3 DOGS
1 CAT
1 COW
1 FOX
OZARK
1 COW
1 FOX
1 SKUNK
1 OTHER
OREGON
1 CAT
2 COWS
RIPLEY
BUTLER
NEW MADRID
PEMISCOT
1 DOG
DUNKLIN
TOTAL CASES 204
65 DOGS
26 CATS
35 COWS
28 SKUNKS
41 FOXES
7 OTHER
1 RACCOON
1 HUMAN

Fig. 2. Missouri Confirmed Rabies—1959

Inability to swallow results in rapid dehydration. Change in expression, dull eyes, abnormal carriage of the ears, bellowing with a characteristic tone, and the development of a more generalized paralysis may be noticed.[4]

In Missouri, the skunk and the fox are the most important reservoirs of wildlife rabies. Change in behavior is the most important sign of wildlife rabies. Wild animals feed at night and avoid humans and their dwellings. When wild animals attack humans or invade human living areas in daylight, they should be viewed with suspicion. Rabid wild animals lose their natural instinct of fear. Attempts to fight off rabid wild animals must be immediately effective to prevent rabies exposure. The saliva of wild animals carry rabies virus many days before clinical symptoms develop.

Recorded instances of wild animals attacking humans in farm yards or in vacation camp grounds are frequent. A female grey fox invaded the camp ground of two adults and four high school boys. The fox was driven away but returned six times before being killed. This fox was found to be rabid after it had bitten one of the campers.[5] A friendly timber wolf was observed running in a pasture with cattle and horses. The wolf was not vicious. A dog was used in an attempt to drive the wolf from the pasture. The wolf refused to leave and fought when cornered. Because of this unusual behavior the wolf was shot and the diagnosis of rabies was established by laboratory examination.[6]

In Missouri so many rabid skunks have been identified that this disease should be suspected immediately when abnormal skunk behavior is observed. A skunk who does not lift his tail when approached may well be rabid.

Bats have recently assumed an important part in the epidemiologic picture of rabies in the United States. Since the first report of bat rabies was made in Florida in 1953,[7] 31 additional states have reported cases of bat rabies. During this seven year period five human rabies deaths have resulted from infected bat bites. Rabid bats attack humans without warning or provocation. They often flutter as if with a broken wing and at times they can be captured easily. Humans should avoid handling bats. Bats should not be kept as pets since rabies virus is shed in the saliva for long periods before the bat develops the disease.

RABIES DIAGNOSIS

The evaluation of a specific human exposure depends on a careful diagnostic study of the biting animal. There are several infectious and noninfectious diseases which must be considered in the differential diagnosis of animal rabies. Foreign bodies lodged in the throat and the encephalitis which accompanies canine distemper mimic rabies in dogs. Kittens are commonly affected with a rapidly fatal feline infectious enteritis. During this illness kittens become irritable and will bite when handled. Intoxications, traumatic reticulitis and listeriosis must be considered in the differential diagnosis of bovine rabies.

Whenever possible a veterinarian should examine any animal that has bitten or scratched a human victim. After examination animals should be isolated for 10 days to allow rabies to develop if present. If the animal is alive and healthy at the end of confinement rabies exposure can be discounted. If the animal dies during the confinement, then specific postmortem diagnosis should be made. The animal head should be submitted to a laboratory staffed by a pathologist or virologist experienced in the laboratory diagnosis of rabies. If the animal head is submitted to a veterinary pathologist, then it is desirable to submit the whole animal body for complete evaluation. Proper shipment of the head is important. The head should be adequately refrigerated but should not be packed directly in ice. No water should come in contact with the head. The head should not be frozen. Rapid delivery to the laboratory is essential, usually shipment by bus or direct delivery by car.

Identification of Negri bodies, rabies virus isolation, and demonstration of rabies virus by fluorescent antibody are the three laboratory technics used in rabies diagnosis. To identify Negri bodies in brain tissue, smears are made from Ammon's Horn of the hippocampus stained with Seller's Stain, and then examined under oil immersion. Negri bodies are eosinophilic inclusion bodies, many of which will have basophilic granules. They are intracellular in nature, but may appear to be extracellular since brain cells sometimes rupture during preparation of the microscopic slide. Typical Negri bodies can be demonstrated by experienced examiners in about 93 per cent of all rabid animals regardless of the clinical stage of the disease.

The second and most accurate of rabies diagnostic technics is the mouse inoculation technic utilizing suspensions of brain tissue, saliva, or salivary glands to test for the presence of rabies virus. Mice inoculated intracerebrally with suspensions of rabies virus will develop rabies within 21 days and their brains will be heavily laden with Negri bodies. The demonstration of rabies virus in the saliva or salivary glands determine actual rabies exposure.[8] About 72 per cent of rabid animals shed virus in their saliva. This fact may help explain why only a small percentage of persons exposed to known rabid animals develop rabies.

The third rabies diagnostic technic is the detection of rabies virus in brain or salivary gland suspensions by the use of fluorescent antibody. Smears of the material containing rabies virus or antigen are coated with fluorescein-conjugated antibody. The rabies virus combines with the antibody and will fluoresce when viewed under an ultra-violet microscope. This technic is rapid and accurate.[9] One cannot await the outcome of specific virus isolation before initiating rabies treatment.

HUMAN RABIES

Symptoms of human rabies suddenly appear usually 10 to 90 days after the bite of an infected animal although incubation periods have been recorded from 10 days to one year after proven rabies exposure. The patient first complains of numbness, burning or tingling around the bite followed by cramping, other paresthesias, fever and headache. Bizarre behavior, hyperexcitability, anxiety hysteria, and progressive delirium, convulsions and hydrophobia are commonly observed. These symptoms may last for four days to be followed by progressive muscular weakness, paralysis, coma and death by the seventh day. Leukocytosis and normal spinal fluid findings are characteristic of human rabies. Treatment in human rabies is supportive. Confinement in a quiet, dark room is advisable

TABLE 1

INDICATIONS FOR GIVING ANTIRABIES VACCINE TO EXPOSED HUMANS

	Condition of biting animal		
Nature of exposure	*At time of exposure*	*During observation period of 10 days*	*Indications for prophylactic treatment*
I. No lesions; indirect contact only (handling of food utensils, toys, bedding, etc.)	healthy or rabid	healthy or rabid	treatment not indicated
II. Licks:			
(1) unabraded skin; pre-existing wounds known to be more than 24 hours old and covered with an unbroken scab	healthy or rabid	healthy or rabid	treatment not indicated
(2) abraded skin or mucosa	(a) healthy	healthy	treatment not indicated
	(b) healthy	clinically suspicious or proven rabid	*start treatment at appearance of first suspicious signs in animal*
	(c) suspicious	healthy	*start treatment immediately; stop treatment if animal remains normal for 3 days*
	(d) animal rabid, escaped, killed, or unknown		*start treatment immediately*
III. Bites:			
(1) skin unbroken or wound protected from saliva by adequate clothing*	healthy or rabid	healthy or rabid	treatment not indicated
(2) lacerations and puncture wounds	(a) healthy	healthy	no treatment, except if bites are multiple, or face, head or neck bites; then treat as in III (c)
	(b) healthy	clinically suspicious or proven rabid	*start treatment at appearance of first suspicious signs in animal*
	(c) suspicious	healthy	*start treatment immediately; stop treatment if animal remains normal for 3 days*
	(d) animal rabid, escaped, killed, or unknown, or any bites by wild animal		*start treatment immediately*

* Such wounds are usually bruises or due to friction from the cloth.

and large doses of barbituates are often necessary to control restlessness and convulsions. Oxygen, parenteral fluids, antibiotics and pressor drugs for the usual sustained hypotension are used as indicated but do not affect the inevitable fatal outcome.

Three autopsy proven cases of human rabies have been reported in Missouri in the last ten years. Three additional suspected cases have been recorded. State-wide totals on human exposure to rabid animals are not available; however, in the last five years 1,931 courses of antirabies vaccine therapy were started in one Missouri Pasteur clinic alone. From July 1957 through June 1960 in 541 courses of antirabies vaccine and serum treatment, there were three cases of severe serum reactions, two painful local reactions to duck embryo vaccine, one case of severe headache, one case of inguinal lymphadenopathy and two cases of severe recurrent nose bleeds attributed to antirabies vaccine therapy. One additional case of severe nonfatal encephalitis occurred during a course of vaccine treatment.

PREVENTION OF HUMAN RABIES AFTER EXPOSURE

All animal bites should be vigorously cleaned and scrubbed with zephiran, soap or detergent. Treatment is directed toward removing, neutralizing or destroying the rabies virus within the wound. Experimental studies indicate that these agents are as effective as fuming nitric acid which is painful and disfiguring. Infiltration of the cleansed wound with hyperimmune antirabies serum will neutralize rabies virus and should be used if available. Primary suturing of animal bites should not be carried out. Tetanus prophylaxis and specific antibiotic therapy should be used in all cases. All persons who have suffered certain exposure to rabies should be vigorously treated. In cases where the biting animal is confined one can await the appearance of rabies in the animal before starting treatment. In cases of doubtful exposure the hazards of specific treatment probably outweigh those of rabies.

Passive immunity to rabies can be successfully induced and maintained for 60 days by prompt administration of hyperimmune antirabies serum. This length of time is sufficient to allow active immunization to occur from concurrent rabies vaccine therapy. The 14 day treatment with one of the commercially available rabies vaccines is recommended. For bites on the head and neck or severe traumatic wounds a 21 day course of vaccine is indicated. Almost all individuals treated with vaccine develop some evidence of sensitivity. By the seventh day large painful indurated swelling may appear at the site of the most recent inoculation and often at all previous inoculation sites. These local sensitivity reactions are painful but not serious, and vaccine therapy should not be discontinued. Iso-Allergic encephalitis, post vaccinal paralysis, rarely occurs. This complication usually appears within three weeks of the first vaccine injection and is characterized by chills, fever, headache, vomiting, disorientation, dysarthria, ataxia, paresthesias, hemiparesis and paraplegia. Iso-allergic encephalitis results from hypersensitivity to the brain tissue contained in the vaccine and results in progressive demyelinating destruction of the patient's central nervous system. Increased spinal fluid protein and mononuclear pleocytosis can be demonstrated in these patients and helps to differentiate this complication from actual human rabies. Iso-allergic encephalitis can be a fatal complication of rabies vaccine therapy; however, most patients recover but residual neurologic damage is not unusual. ACTH and adrenal corticosteroid therapy is indicated for iso-allergic encephalitis.

Many animal bite victims develop marked anxiety symptoms associated with a morbid fear of impending rabies. Rabiphobia can appear in victims who have no definite rabies exposure as well as in patients undergoing a course of rabies vaccine therapy after proven rabies exposure.

Headache, paresthesias and hysterical paralysis have been observed, usually appearing toward the end of an imaginary incubation period. Physicians and health personnel should be patient, and optimistic and avoid any pessimistic comments about rabies around animal bite victims. Mild rabiphobia will respond to constant reassurance but severe cases are disabling and may demand long term psychiatric care.

SUMMARY AND CONCLUSIONS

(1) Rabies is an increasing public health problem in Missouri. The incidence of bovine and wildlife rabies is increasing while the incidence of canine rabies has decreased, largely due to widespread voluntary rabies vaccination of owned dogs.

(2) A patient's description of a biting animal can often help a physician decide on a course of antirabies therapy even though accurate animal rabies diagnosis rests with the veterinary profession and on specific laboratory studies.

(Continued on page 466)

HAROLD LISCHNER, M.D., ***Columbia***

Neonatal Jaundice

Physiologic and pathologic jaundice of the newborn infant are briefly reviewed in the light of recent research on the metabolism of bilirubin. Some suggestions on the management of these conditions are made.

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THE EXACT DEFINITION of "physiological jaundice" of the newborn infant has remained an enigma since ancient times. Although biochemical immaturity of the liver was suspected as a cause by some early workers, it is only in the last five years that enough information has emerged about the metabolism of bilirubin to identify this phenomenon. Even today it is impossible to clearly separate "normal" from "abnormal" hyperbilirubinemia in newborn babies, but recent research[1] on the metabolism of bilirubin has helped to clarify the problem.

BILIRUBIN METABOLISM

The stepwise degradation of hemoglobin in the reticuloendothelial system leads primarily to bilirubin. In its unconjugated ("indirect") form it is insoluble in water, but is carried in the blood plasma rather closely attached to serum albumin. Before excretion by the liver it is converted to bilirubin-glucuronide ("direct" bilirubin) in the liver. Passage of "direct" bilirubin from the blood stream into the bile is probably an active secretory process requiring intact enzyme systems in intact liver cells. The bilirubin reaching the intestines via the biliary channels is almost completely reduced to urobilinogens by intestinal bacteria. The urobilinogens in turn are partially reabsorbed and reexcreted in the bile and urine. Newborn infants (as well as individuals who have received excessive oral antibiotic therapy) do not have sufficient intestinal bacteria to bring about this conversion, and most of the bile pigment is eliminated in the stools as bilirubin-glucuronide.

Predominantly "indirect" hyperbilirubinemia is associated with orange-colored skin, and may result from: (1) excessive production of bilirubin due to hemolysis of red blood cells or breakdown of hemoglobin or its porphyrin precursors in nucleated red cells and reticulocytes, or (2) inadequate conversion of bilirubin to its glucuronide because of immature or damaged enzyme systems in the liver cells.

Predominantly "direct" hyperbilirubinemia is associated with green-yellow jaundice and may occur with: (3) inadequate secretion of bilirubin-glucuronide into the bile because of damage to, or a congenital defect of, hepatic cells, or (4) obstruction to the outflow of bile with reflux of "direct" bilirubin back into the circulation.

Due to difficulty in standardizing the procedure, interference of small amounts of hemoglobin with bilirubin analysis, and instability of bilirubin on storage (especially its glucuronide), reports of the concentration of bilirubin and the ratios of the two pigments[*] will frequently differ widely if the same serum sample is sent to different laboratories.[3] In practice one nearly al-

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[*] There are now numerous modifications of the "van den Bergh reaction" available for use in bilirubin determination, but in none of these is the "direct" reaction specific for bilirubin-glucuronide. There is also dispute over whether conjugated bilirubin exists exclusively as the diglucuronide or whether an intermediate form, the mono-glucuronide, appears in acute hepatitis and related diseases. Other bilirubin conjugates are also known to exist.[2]

RABIES—Continued

(3) Human rabies diagnosis, treatment and complications are reviewed.

(4) Missouri needs a realistic rabies prevention and control law.

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ways finds mixtures of the two bilirubins. In an individual case, experienced clinical judgment will usually tell the physician whether this is an artifact of laboratory methodology or evidence of defects at more than one level of bilirubin metabolism.

TABLE 1

CONDITIONS WHICH MAY LEAD TO NEONATAL HYPERBILIRUBINEMIA

Conditions Leading to Jaundice	*Probable Mechanism* (as numbered in text)	*Some Identifying Features*
Erythroblastosis		
Rh and minor factors	1	Jaundice within first 24 hours, positive direct Coomb's test
ABO	1	Slower appearance of jaundice, spherocytes, immune hemolysins in maternal serum
"Inspissated bile syndrome"	3, ?4	Prolonged direct hyperbilirubinemia after erythroblastosis
Hypoxia due to any cause	2, 3, ?1	Apnea, respiratory distress, complications of delivery
Prematurity	2, 3, ?1	Signs of immaturity
Bacterial sepsis	1, 2, 3	Lethargy, shock, leukopenia, positive blood culture
Intoxications		Drug contact (mother or infant)
Vitamin K	1, ?2, ?3	10 mg.(?) or more of "synkovite"
Naphthalene	1	Moth balls in diapers
Chlorpromazine and derivatives	?2, ?3	
Antihypertensives (?)	?2	
Biliary Atresia or Hypoplasia	4	Persistent direct hyperbilirubinemia usually evident in 2nd week
Metabolic Diseases	2	Signs of maternal diabetes, cretinism, mongolism
Special infections	3, 2, ?1	Features of lues, hepatitis, toxoplasmosis, other viremias
Extravasation of blood	1	Cephalohematoma, GI bleeding
Other hemolytic anemias	1	Spherocytes, pyknocytes, eliptocytes, family history
Natural toxins		
Maternal progesterones (?)	2	
Galactosemia	3	
Maternal thyrotoxicosis (?)	?	

Physiologic Jaundice

The enzyme system responsible for conversion of bilirubin to bilirubin-glucuronide operates at only 1 to 2 per cent of adult capacity in the normal newborn infant's liver, and is probably less effective in the livers of premature infants.[4] Maturation of this enzyme system is rapid but is probably not complete until the infant is several months of age, perhaps later. If bilirubin is not conjugated, it cannot be excreted by either the liver or the kidneys. When the rate of bilirubin production exceeds the rate of conjugation or excretion, hyperbilirubinemia occurs. Such an imbalance between production and conjugation is invariably present during the first few days of life. Whether increased blood destruction (factor 1 as given) is also operative to a small extent in the normal newborn infant has not yet been determined. To what extent the decreased secretory capacity of newborn liver cells (as demonstrated with the "BSP" and other tests) limits the secretion of conjugated bilirubin has also not been determined, but small amounts of "direct" bilirubin do appear in the serum, especially of premature babies.

Usually the ability of the newborn infant's liver to conjugate and secrete bilirubin exceeds the rate of bilirubin production by the third to fifth day (later in premature infants). At that time the serum bilirubin level begins to decrease, having reached a maximum of 2 to 12 mg./100 ml. (or higher in some premature infants) of primarily "indirect" bilirubin.

Pathologic Jaundice

Almost any insult to the infant's health can upset the delicate balance between production and elimination and produce increased bilirubinemia.[5] Some known causes are listed in the table in their estimated order of frequency of occurrence. A few important criteria useful in their diagnosis are also indicated.

It is not infrequent, however, for a newborn infant to develop excessive bilirubinemia without any other signs of known disease. Do such infants have an unusual degree of "physiologic jaundice"? The answer may come with the extension of current research on the mechanisms of bilirubin production, conjugation and secretion, and the clinical effects of such factors as dehydration, hypoglycemia, light exposure, body temperature and drugs upon bilirubin metabolism.

MANAGEMENT

Erythoblastosis due to Rh factor should usually be discovered before clinical jaundice appears. A direct Coomb's test performed on the cord blood of every infant born to an Rh negative mother will permit diagnosis and early therapy. The indications for therapy have been outlined in detail elsewhere.[6] In this short review we offer only a few additional suggestions regarding the management of neonatal jaundice after it appears:

1. An infant with clinical jaundice during the first 36 hours of life or with deep-orange-colored skin at any age does not have "physiologic" jaundice and deserves careful study. The icterometer[7] or similar instruments may prove helpful in the evaluation of jaundice in some hospitals.

2. Single serum bilirubin determinations should not be relied upon alone, but total bilirubin levels over 12 mg./100 ml. for term babies at 2 to 5 days of age and 18 mg./100 ml. for premature infants deserve further investigation.

3. Early neonatal hyperbilirubinemia should be considered to be due to erythroblastosis until proved otherwise. Such proof requires a negative direct Coomb's test of the infant's cells as well as absence of maternal-fetal A-B-O blood-type incompatability or absence of immune hemolysins or blocking antibodies in the mother's serum.

4. If hyperbilirubinemia is verified, hemolytic disease unlikely, and no immediate cause evident, blood should be taken for culture, and antibiotic therapy should be initiated while additional studies are continuing. Sepsis can occur without other signs or symptoms.

5. An infant with indirect hyperbilirubinemia, regardless of the cause, should probably receive an exchange transfusion if his total bilirubin is rising and is near or above 20 mg./100 ml., or if he develops seizures, opisthotonos, lethargy or spasticity not otherwise explained. (This is recommended until more is known about factors other than "indirect" bilirubin level in the serum which undoubtedly affect the susceptibility of the infant to kernicterus.)

6. Until more is known, it is best to provide the jaundiced infant with a relatively high intake of water and sugar by the oral or parenteral route.

7. Sulfa drugs, glucuronic acid and salicylates should not be given to the jaundiced infant. They may break the loose bilirubin-albumin bond and displace the bilirubin to tissue cells including the central nervous system.[8]

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Winslow Homer "THE HERRING NET" *Art Institute of Chicago.*

STRAIN

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SEARLE

FRANK J. MANGANARO, M.D., ***St. Louis***

Lymphosarcoma of the Cervical Epidural Space

Report of a Case

Involvement of the spinal epidural space by malignant lymphomas secondary to the disease elsewhere is common. However, primary lymphomas of the spinal epidural space are indeed rare. In the English medical literature few cases have been reported in the past four decades.[1, 2, 3, 4, 5] Love, Miller and Kernohan[5] reported 39 cases, a ratio of about 4 per cent of the total number of surgically treated tumors of the spinal cord.

This case is presented because of the bizarre clinical symptoms and findings, an apparent but short-lived remission with corticosteroid therapy and striking improvement after surgical decompression followed by irradiation treatment.

Report of Case

Mrs. L. P., a 58 year old housewife, was first examined on February 10, 1958. Her chief complaints were severe neck pain of five weeks' duration. She had been to a physician who hospitalized her and manipulated her neck under anesthesia, which only served to make her worse. The pain was described as "severe spasms" from the left trapezius area to the region of the occiput.

General examination revealed only spasm of the muscles of the neck with increased thickness of the subcutaneous tissue of the neck and the occipital region of the scalp. This latter finding was attributed to the spastic muscles and the habitus of the patient. No nodes were palpable in the neck or elsewhere. The neurologic examination was normal. The patient was given an analgesic which afforded her relief for only two days.

First Hospital Admission, February 13, 1958.—X-ray studies of the chest, skull, cervical and dorsal spine were interpreted as normal except for "minimal hypertrophic spurring" about the anterior aspects of the bodies of the upper dorsal vertebrae. An electrocardiogram was within normal limits.

The laboratory studies were as follow: Hb. 14.2 G.; hematocrit 40; sedimentation rate 13; white blood cells 7,050 with essentially normal differential; urinalysis normal; VDRL nonreactive; fasting blood sugar 128 mg. per cent; nonprotein nitrogen 36.5 mg. per cent; alkaline phosphatase 1.3 sigma units; total protein 5.7 G., albumin 4.4 G., and globulin 1.3 G.

A diagnosis of an acute fasciitis syndrome was made. Two days after admission she was given 40 units of ACTH. The next day there was a dramatic improvement. When the patient was discharged she was free of pain for the first time in about seven weeks.

She was seen in the office at about weekly intervals. Treatment consisted of prednisolone 10 mg. daily and injections of 20 units of ACTH about once weekly. The drugs were discontinued on March 17, 1958. One week later the painful "spasm" recurred. Again they responded well to the same combination of drugs. Each time the corticosteroids and ACTH were discontinued or decreased, the pain recurred. Other drugs such as phenylbutazone were tried but were ineffective. Since this therapy had to be maintained for several months, an androgenic-estrogenic combination was given to prevent osteoporosis. The possible hypokalemia was controlled by generous amounts of orange juice taken daily. On June 19, 1958, the patient complained that her arms and hands were becoming numb and weak. Shortly afterwards she developed paresthesia of both hands and some difficulty in walking.

While involvement of the spinal epidural space by malignant lymphomas secondary to the disease elsewhere is not unusual, primary lymphomas of the spinal epidural space are rare. Such a case is reported.

Dr. Manganaro is a graduate of Creighton University School of Medicine, Omaha, and restricts his practice to internal medicine.

Second Hospital Admission, July 5, 1958.—The admitting diagnosis was probable cervical spondylosis with nerve root involvement. X-ray examination of the chest and cervical spine were unchanged. The blood count and urinalysis were normal. Spinal lumbar puncture was done on July 10. The pressure studies were normal. Examination of the spinal fluid revealed it to be clear with no cells. The protein was elevated slightly to 58 mg. per cent (normal at this hospital 15 to 45 mg.).

The patient was seen by a neurosurgeon. His neurologic examination revealed only mild to moderate weakness of the left arm with some slight wasting of the thenar eminence. It was his opinion that the patient had nerve root involvement, more marked on the left, secondary to cervical spondylosis, disk protrusion or a spinal cord tumor. A myelogram was done. There was a constant concave indentation at the level of the 5th and 6th interspace on the right. This was felt to be secondary to hypertrophic spur formation or a ruptured nucleus pulposus. The neurosurgeon felt there was insufficient evidence for surgical exploration at that time and recommended cervical traction. This was done for two days but the pain was unbearable. Intravenous infusions of 500 ml. of 5 per cent dextrose in water containing 1 gram of procaine hydrochloride were given daily for three days.

There was sufficient relief of pain to permit her to be discharged on July 16. The weakness of the arms and the paresthesia of the fingers was unchanged. In retrospect, the myelogram done during this admission did reveal a constant filling defect but on the left between C2 and C3 (fig. 1).

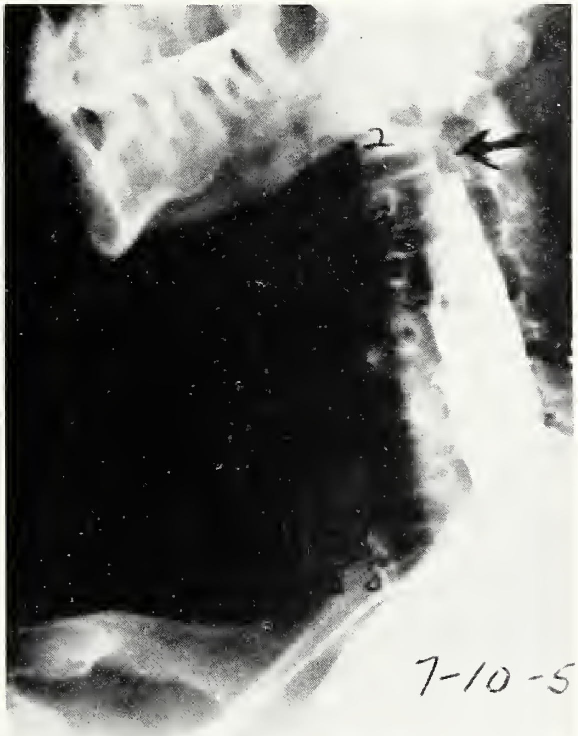

Fig. 1. Myelogram taken during the second hospital admission showed a constant filling defect between C2 and C3.

The next month was extremely trying to the patient and myself. Cervical traction by means of a halter and an appliance which she wore constantly afforded little relief. The pain was not as severe as it had been but the weakness of the arms, the tingling of fingers and the difficulty in walking were quite distressing to the patient.

Third Hospital Admission, August 16, 1958.—By this time, the patient was in constant distress. The facies was slightly puffy. The neck was held in a rigid attitude. There was generalized tenderness over the entire back of the neck up to the occipital area. Both hands were somewhat diffusely swollen. There was marked weakness of the grip of both hands. Bilateral Hoffman's signs were elicited and I thought the deep reflexes were increased. The gait was slow and unsteady. There were no other abnormal physical findings. X-ray re-examination of the cervical spine with detailed views of C1 and C2 were again unremarkable. The admission routine laboratory studies were not remarkable.

The patient was again examined by the neurosurgeon but he felt that an underlying cervical spondylosis would best explain her symptoms and findings. He also stated that a "good portion of the findings are functional." The patient was then seen by a neuropsychiatrist. It was his opinion that there was no clinical evidence of organic disease of the central nervous system or the peripheral nervous system. The patient was followed daily by the neurologist and he did two additional neurologic examinations. The findings to him were bizarre, seemed to change with each examination and did not fit any definite pattern. He concluded that, although the patient might have "bony pathology," the patient had developed a psychoneurosis, conversion hysteria type. It was felt that the patient might benefit from electroshock therapy. During one of these treatments it was noted by the neuropsychiatrist that, despite the fact that a low dose of a curare-like drug was given prior to treatment, there was practically no contraction of the muscles of the arms or legs. This was objective evidence of an underlying organic disease, probably a tumor of the spinal cord. The myelogram was repeated on October 2. This time, the spinal fluid protein was 340 mg. per cent. Fluoroscopic and radiographic studies showed a constant block of the opaque media in the region of C3 and C4 (fig. 2).

The patient was operated on October 3. The operative note was as follows: "The muscles contiguous to C1 through C4 on the left were almost completely replaced by a solid pale, pink-gray, liver-like mass about 3 by 1.5 by 1.5 inches. This mass was removed exposing the laminae. A bilateral laminectomy of C1 through C4 was done with decompression of the cord. The C1-C2 interspace was completely filled and widened by this same tumor mass which was bound to the dura and seemed to infiltrate the yellow ligament and to a slight extent the spines and the laminae at this level. The left C1-C2 interspace was completely filled by tumor which extended out through the foramen into the soft tissues to connect with the original large mass. The same tumor mass intraspinally lay over the C1-C2 interspace, but the same tumor mass extended downward along the extradural space laterally on the left side and to some extent on the right side to involve all the nerve root sheaths at this level without compression of the cord below the

C1-C2 level. The tumor mass underlying the laminae and compressing the cord at the C1-C2 level was completely removed so that the cord lay free. There was no mass palpable in the cord, which was relaxed and pulsating at the end of the procedure." A tracheostomy was done because of marked edema of the pharynx.

Pathologic Report.—"The specimen is said to be a tumor from the cervical area and consists of approximately 50 grams of irregular fragments of firm gray tissue, the largest of which measures 5 by 3 by 2 cm. This tissue at frozen section was found to be malignant. The larger fragments cut with a gritty sensation to reveal a homogenous white fleshy appearing surface. Microscopic examination reveals large fragments of neoplastic tissue invading and replacing skeletal muscle. These neoplastic cells are atypical lymphocytes with minimal plenomorphism and little mitotic activity. Diagnosis: Lymphosarcoma."

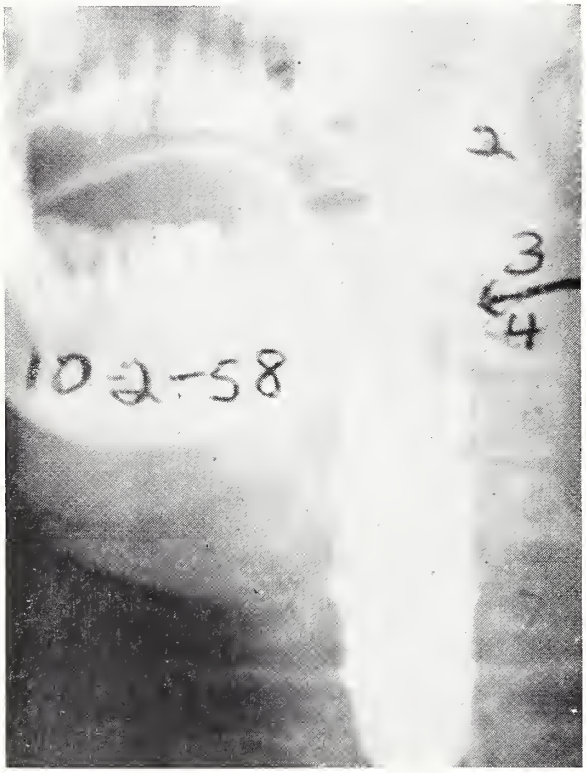

Fig. 2. Fluoroscopic and radiographic studies showed a constant block of the opaque media in the region of C3 and C4.

The postoperative course was uneventful. There was a gradual return of power of the arms and legs. The patient was started on triethylenemelamine on October 7. On October 17, she was started on x-ray therapy. A total dose of 3800 r was given. On October 19, she was started on physiotherapy. By the time of discharge on November 20, the patient was able to walk fairly well with the aid of a walker.

The improvement since her discharge from the hospital has continued. She has been continued on TEM and is now taking 5 mg. every two weeks. She was last seen on August 5, 1959. She had no pain. She is able to do all of her housework and even enjoys working in the garden. The early ankylosis of disuse of the fingers, wrist and shoulders has been reversed so that the motions in all her joints are now normal. Her gait is almost normal. The paresthesia of the fingers remains but when last seen, she felt this was showing signs of improving.

Discussion

In nearly all cases of lymphoma of the spinal epidural space, pain was the original symptom.[4] This was true in 85 per cent of 33 cases reported by Love et al.[5] This was the initial complaint of the patient herein reported. Other symptoms in the series reported by Love and his group were weakness, 77 per cent; paresthesia, 62 per cent; incontinence, 51 per cent. My patient developed all of these symptoms and in that order. The signs listed by Love et al. included sensory change, 77 per cent; weakness, 72 per cent; reflex changes, 77 per cent; paraplegia, 18 per cent, and subarachnoid block, 67 per cent. Only 72 per cent showed increased protein of the spinal fluid which varied from 45 mg. per cent to greater than 4,000 mg. per cent. They observed evidence of an intraspinal lesion on plain roentgenograms in 33 per cent. Histologic examination showed that 14 cases were lymphosarcoma, small cell type; 11 were reticulum cell sarcoma; seven were Hodgkins disease; six were a mixture of small and large cell sarcoma; three were classified as a mixed type of tumor; and in one case the tumor could not be classified accurately. The location of the lesions in this group were thoracic, 25 cases; lumbar or lumbosacral, 13 cases; and the cervical cord in one case. Browder and deVeer[2] reported that in six cases, three were at the thoracic level; two were at the thoraco-lumbar level, and one was at the lumbar level. Of the other two cases reported[3, 4] the site of both lesions was at the thoracic level. Therefore, of the total of 48 cases, including the one herein reported, only two were at the cervical level.

All of these cases reported had no evidence of lymphomatous disease elsewhere at the time of surgery. What is the origin of lymphoblastoma occurring only in the spinal epidural space? Direct spread through the intervertebral foramen has been proposed by Drake[6] and others.[7] Small lymph nodes in the mediastinal, retroperitoneal or subpleural areas could be missed at surgery or at necropsy. Others[8, 9] have suggested the vertebral body as the source of the lymphoma.

It is known that the lymphatic drainage of the spinal canal is to the mediastinal and retroperitoneal lymph nodes. The lesions may spread via this route. Whether or not there is lymphatic tissue in the spinal canal is unknown. Since lymphomas probably start in the reticuloendothelial system which is found everywhere in the body, there is a possibility that these lesions can occur primarily in the spinal epidural space. In the case herein reported the muscles contiguous to the cervical laminae were in large part replaced by the tumor. Whether the tumor started in the muscles, a small undetected lymph node or in the epidural tissue is impossible to ascertain. However, since nerve root pain was the first symptom there is a distinct possibility that it arose in the epidural space and spread to the muscles. There has never been any evidence of lymphosarcoma elsewhere.

The prognosis is regarded as poor by Love and associates.[5] Most of their patients lived only a few months, although some survived for a long time (four to 18 years).

The treatment of choice is surgical decompression of the cord followed by irradiation therapy. Chemotherapy may be helpful in these cases as it is sometimes in involvement of other areas. The use of corticosteroids and ACTH was not helpful in the one case in which it was used by Love et al. Stickeny[10] has reported that cortisone will aid the acute subjective symptoms but will not affect the pathologic changes. This apparently occurred in the case herein reported. She had dramatic relief for about six months as long as the drugs were continued. The drugs had no effect on the weakness or paresthesia. Ultimately, even the pain was refractory to the corticosteroids and ACTH.

Summary

A rare case of apparent primary lymphosarcoma of the cervical epidural space is reported. The clinical picture was bizarre rendering the diagnosis difficult. Surgical decompression followed by irradiation treatment resulted in dramatic improvement.

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CLARENCE E. THOMPSON, M.D.; SAMUEL P. W. BLACK, M.D.,
and WARREN P. SIGHTS, JR., M.D., *Columbia*

Lipoma of the Spinal Cord

Report of a Case

Lipomas of the spinal cord are rare, their origin uncertain and treatment is often impossible and always difficult. To the limited number of case reports of this lesion, an additional one is added.

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A LIPOMA OF THE SPINAL CORD is a rare lesion. In 1957 Caram, Scarcella and Carton,[1] reviewing all recorded cases of intradural lipoma, tabulated 51 of which more than half appear to have involved the spinal cord. At least two additional cases involving the cord have since been reported.[3, 6] Their origin is enigmatic and, while histologically benign, treatment is often impossible and always difficult. Owing to their rarity and the questions, mainly unanswered, of etiology and treatment which are involved, this additional case of a spinal cord lipoma is believed to warrant a brief recording.

CASE REPORT

P. E. W. (U.M.M.C. No. 02-22-68). This 32 year old white, male mechanic was admitted to the University of Missouri Medical Center on April 28, 1960, with the history of "weakness in the left leg" and difficulty walking of two years' duration. The onset was insidious and without any known precipitating cause. The weakness, confined to the left lower extremity, progressed steadily and occasionally was accentuated by a "shooting pain" to the left ankle when walking. In the three months prior to admission ambulation required the use of a cane but even so was difficult because of a "stiffness" of both lower extremities. Sensation in them was diminished. There were, however, no sphincter disturbances. A slight "soreness" in the thoracic region of his spine had also developed. A review of the past and family histories was non-contributory. In 1951 he had been rejected for military duty owing to color blindness.

Physical examination revealed no overt congenital anomalies and generally was within normal limits save for the nervous system. The patient was color blind but the visual acuity was 20/20 bilaterally and the eyegrounds were normal. The spine was not painful to percussion. Muscle tone in the left lower extremity was greatly increased even at rest and a clonic tremor, worse on the left, was induced in both lower extremities by passive movement. The circumference of the left calf was 5 cm. less than the right. A Babinski response was demonstrable bilaterally and the abdominal reflexes were hypoactive. There was diminished sensation to pain, temperature and touch distally from the T4 dermatome which was more marked on the right, thus displaying a Brown-Séquard type of deficit. A complete blood count and urinalysis were normal. A lumbar puncture and

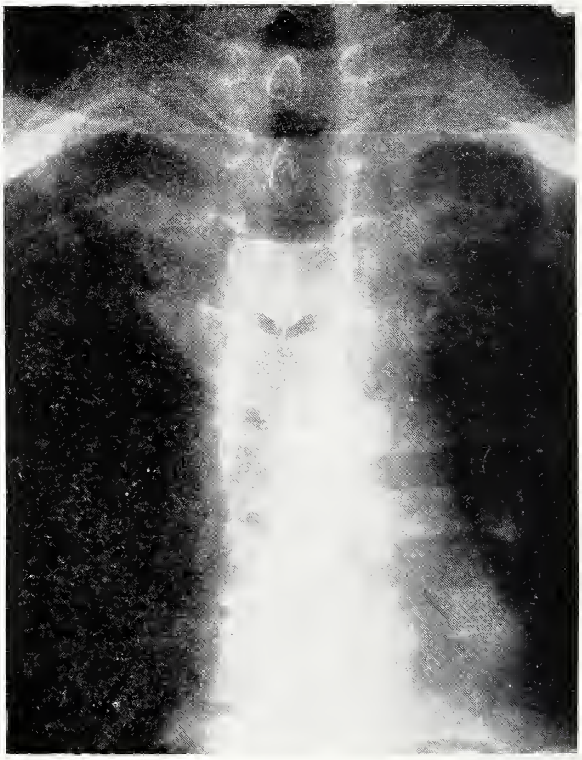

Fig. 1. Antero-posterior roentgenogram of the thoracic spine showing erosion of the pedicles at T3, T4, and T5 bilaterally.

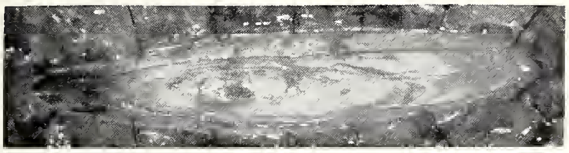

Fig. 2. The lipoma as it appeared at operation.

myelogram were believed to be not indicated in view of the x-ray findings.

Roentgenograms revealed a normal chest; films of the thoracic spine showed marked erosion bilaterally of the pedicles at T3, T4, and T5 (fig. 1).

Under general anesthesia a laminectomy extending from T2, through T7 was performed. The dura mater was thinned and bulging and, when opened, revealed a slight greyish mantle encasing a mass of soft, yellow, fatty tissue that merged imperceptibly with the spinal cord at its upper and lower extremities (fig. 2). Neural tissue could not be identified anteriorly upon rotating the tumor although nerve roots were seen emerging laterally through it. Neither could a cleavage plane be identified nor developed between cord and tumor at its upper and lower limits. A biopsy taken from the posterior aspect of the lesion revealed it to be a lipoma on frozen and subsequent paraffin sections (fig. 3). The major portion of the tumor remained behind. Closure of the dura was not done.

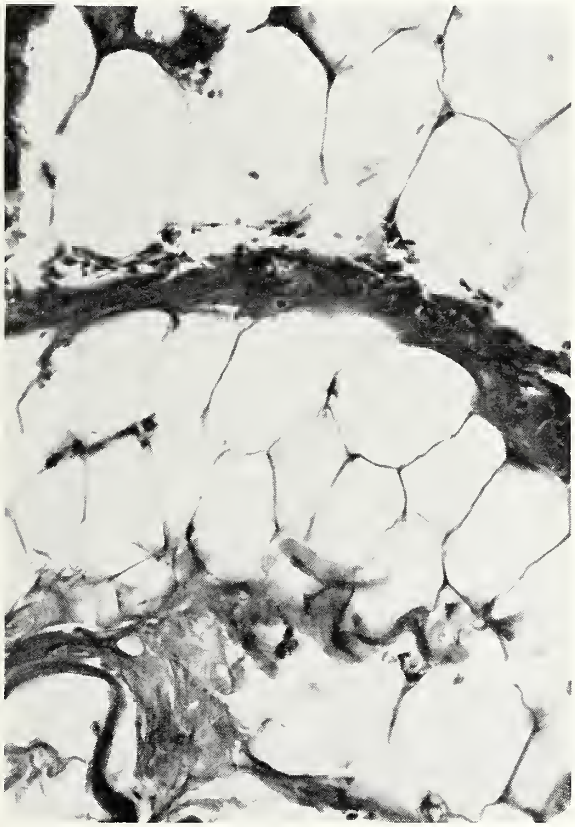

Fig. 3. Photomicrograph of the spinal cord lipoma. Mature fat cells are seen resting on narrow fibrous tissue septae (Hematoxylin and eosin stain, ×300).

Postoperatively the patient's course was uncomplicated, and he was discharged on the 11th day after the procedure. X-rays showed the extent of the laminectomy (fig. 4). On follow-up visits his neurologic examination showed no definite change from the preoperative condition.

Discussion

Intraspinal lipomas not associated with spina bifida constitute about 1 per cent of all spinal tumors and are equally divided between the sexes.[7] As in this case involvement of the thoracic region, usually over several segments, is most common.[1] There is considerable doubt that these tumors are ever truly intramedullary in origin because fat lying free within the spinal cord has not been described. Adipose cells have been found, however, within the leptomeninges and it would seem possible that they grow inward from that site. Other theories of their origin are that they result from a transformation of connective tissue of the pia-arachnoid membrane or, possibly, that they arise by virtue of a develop-

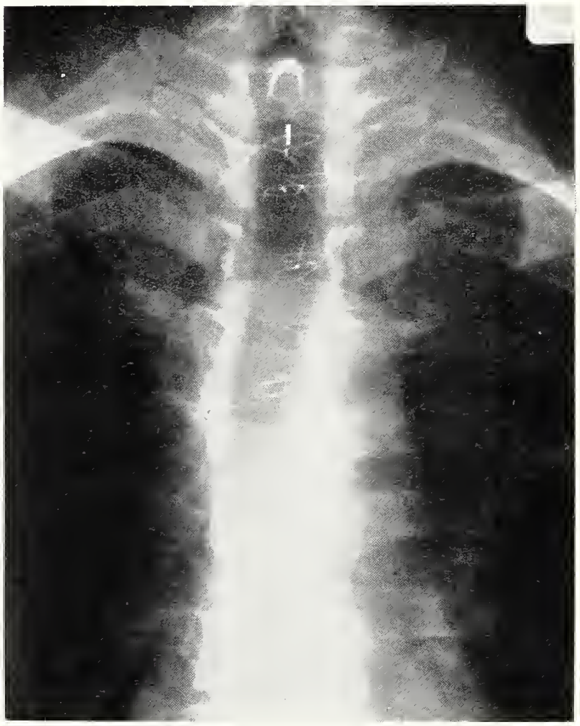

Fig. 4. Antero-posterior roentgenogram of thoracic spine showing the laminectomy from T2 through T7. Wire sutures were used to close the muscle and deep fascial plains.

mental error in which embryonic rests are deposited intradurally.[7] The present case may possibly shed a little additional light on the question of origin because this tumor, presenting massively in the upper thoracic region, totally obscured the spinal cord in that area and merged only gradually with it cephalad and caudad. The leptomeninges were intimately adherent to the mass, and it would seem not unlikely that the fat and fibrous tissue originated from them and grew into the cord. The fact that no neural tissue was present in the sections taken from the surface of the mass argues against it having arisen from an intramedullary site. We agree with Ehni and Love[2] that the classification of spinal lipomas into extramedullary and intramedullary may be overly refined.

The neurologic changes were quite in keeping with a slowly growing tumor in this location and the roentgenograms gave so convincing support that myelography was not indicated. Unfortunately the tumor fused with the spinal cord in such fashion as to preclude its removal and limited the excision to ample biopsy. This too is the usual state of affairs,[1] although in an occasional case, such as that of Sachs and Fincher,[5] a cleavage plane can be found, assiduously developed, and the mass totally removed. X-ray therapy is of no avail.

The microscopic appearance of the tumor in this case demonstrated characteristic mature fat cells resting on narrow fibrous tissue septae. Russell and Rubinstein[4] describe the development of a variable amount of collagen where the lipoma impinges on nervous tissue and may even penetrate it.

SUMMARY

The case of a young man with a lipoma of the spinal cord is presented and the origin, clinical characteristics and treatment of this rare form of tumor discussed.

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LOUIS BELINSON, M.D., ***Jefferson City***

Modern Research in Mental Retardation

A Special Article

Retardation in Missouri and in the national population is discussed, together with review of various reports and discussion of work that is being carried on at the present time.

This paper was presented before a Conference Group on Psychiatric Nursing Practice, Missouri State Nurses Association, at Jefferson City, January 27, 1961.

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Almost every physician in general practice and in a good number of specialties find they have to consider the question of mental retardation many many times in the daily practice of medicine. They probably will rule out mental retardation, as a factor, more often than actually diagnosing the child as such. A similar situation is reported by men specializing in child psychiatry who state that for every one patient found to be psychotic, there are 20 for whom some evaluation of mental capacity or mental competency has to be made. As doctors and nurses then, some knowledge of mental retardation in its medical and psychiatric implications is needed now perhaps more than ever. It not only is possible to prevent several forms of mental retardation today, but significant advances in the training, treatment and habilitation have been made both in the field of education as well as medicine.

There are more than five million mentally retarded individuals in the United States, of whom 126,000[14] are in the State of Missouri. There are 225 institutions[1] of all types presently in operation providing care and training, of which about 115 are state-operated facilities such as the institution at Marshall (the Marshall State School and hospital). A recent survey reveals the interesting fact that 63 per cent of the public facilities for the retarded person are under the administrative direction of physicians, about two-thirds of whom are psychiatrists.[2]

The trend to rename these institutions as state schools and hospitals is evidence of the fact that an increasing number of patients presenting medical and nursing problems are now being admitted. In fact, in the state schools in Missouri at Marshall, Carrollton, Higginsville, as well as the St. Louis State School, approximately 70 per cent of the patients in residence are severely limited in intellectual capacity. The brighter girls and boys for whom both academic and training programs have been established are admitted invariably bringing with them severe emotional problems, anti-social delinquent behavior and personality disturbances bordering on mental illness. The majority of this group would have ordinarily remained in the community and attended the special education classes were it not for factors of broken homes, alcoholism, deprivation, neglect and actual mistreatment. These are psychiatrie problems in children. Their difficulties basically resemble those of persons being cared for at the Fulton State Hospital and at the St. Louis State Hospital in the program for adolescents. The treatment goals are the same. However, the mild to moderate degree of mental retardation does alter the training and rehabilitation technics. There are many emotionally disturbed children in state schools deserving of the finest efforts of psychiatrists and psychiatric nurses.

The public residential schools for the mentally retarded, increasing in medical significance, have been the source of many fruitful investigative projects. These have stimulated hope, enthusiasm and research efforts beyond imagination 20 or 30 years ago.

If one examines the composition of an average state school, one would find the classification distribution of patients in the following relationships: (1) Ten per cent would have been diagnosed as mongoloids; (2) 27 per cent associated with physical abnormalities—many of them involving cranial maldevelopment; (3) 10 per cent associated with trauma or infection as having etiological significance; (4) 13 per cent associated with inbred errors of metabolism, and

(5) 40 per cent would be grouped as subcultural. This is related essentially to the lack of capacity or ability to perform and compete in modern society. In most instances, the etiology is still obscure.

One can approach the composition of the patient classifications in another way. Eighty-seven per cent of the mentally retarded in the general population would fall into the educable group, with 10 per cent classified as trainable. The remaining 3 per cent are in the group called custodial or dependent or the severely retarded. In state schools, 70 per cent of the patients would psychologically be included in the trainable and dependent groups which constitute only 13 per cent of the retarded in the general population.

A pattern seems to be unfolding revealing more clearly the roles of the several disciplines which have been making stellar contributions to the unravelling of the perplexing problems of mental retardation. I shall focus my remarks in the medical area of investigation, but without outstanding contributions from special education, social service, psychology and administration, medical progress would not have been as rapid nor fruitful.

A classification outline should help to delineate the various types of mental retardation both for purposes of statistics as well as training and treatment objectives. However, today one does find a lack of coordination even between the most significant groups working in this field. The American Psychiatric Association in its Classification Manual[3] makes no effort to actually differentiate the patients with intelligence quotients below 50. This is understandable because emotional problems of the nature requiring psychiatric treatment are rarely if ever found in individuals with such a degree of retardation. The subcultural group mentioned previously are diagnosed in this Manual under the heading of mental deficiency; whereas many of the abnormalities, inbred errors and post-infectional conditions are distributed among the classifications listed as "chronic brain syndrome."

In 1959, seven years following the publication of the American Psychiatric Association Manual, the American Association on Mental Deficiency issued its contribution to the problem of terminology and classification in mental retardation.

This Classification Manual[4] uses the following eight groupings:

1. Associated with infection.
2. Intoxications.
3. Trauma.
4. Disorders of metabolism, growth or nutrition.
5. New growths.
6. Prenatal causes (unknown).
7. Uncertain causes with structural reactions.
8. Retardation with demonstrable relationship to environmental and cultural stress.

Both systems, of course, are intended to facilitate recording for statistical purposes and are coded accordingly. There is another grouping that I have found most useful based upon the chronological sequence of events—prenatal, natal or postnatal.

Perhaps a rapid survey of this classification grouping would be helpful, as a frame of reference, for several specific conditions which I will elaborate upon subsequently.

The types are described as follows:

Prenatal.

- I. Metabolic disorders.
  - A. Protein.
    - 1. Phenylketonuria.
    - 2. "H" disease (Hart).
    - 3. Hepatolenticular degeneration (Wilson).
  - B. Carbohydrate.
    - 1. Galactosemia.
    - 2. Gargoylism.
    - 3. Hypoglysemia.
  - C. Lipid.
    - 1. Cerebral lipoidosis (Tay-Sachs).
    - 2. Histiocytosis—kerasin (Nieman-Pick).
    - 3. Histiocytosis—phosphatide (Gaucher).
  - D. Hormone Synthesis.
    - 1. Hypothyroidism.
      - a. Cretinism.
  - E. Suspect Condition.
    - 1. Idiopathic hypercalcemia.
    - 2. Non-hemolytic jaundice.
- II. Malformations (cranial abnormalities).
  - A. Macrocephaly.
    - 1. Hydrocephaly.
  - B. Microcephaly.
  - C. Oxycephaly.
  - D. Hypertelorism.
- III. Infections.
  - A. Rubella.
  - B. Syphilis congenital.
  - C. Others.
- IV. Trauma.
  - A. Hemorrhage.
  - B. Thrombosis.
- V. Erythroblastosis fetalis (Rh factor, kernicterus).
- VI. Radiation—mutations.
- VII. Mongolism.

VIII. Chronic degenerative conditions.
    A. Lawrence—Moon—Beedl.
    B. Tuberous sclerosis.
    C. Von Recklinghausen.
    D. Sturge—Weber.

Natal.
  I. Hemorrhage.
  II. Anoxia.
  III. Trauma.

Postnatal.
  I. Infections.
  II. Intoxications.
    A. Prophylactic immunization.
  III. Trauma.
  IV. Anoxia.
  V. New growths.

The seven conditions associated with mental retardation which I have selected for discussion have stirred intense interest in an area which for years was frankly neglected. Not only the observations and findings pertaining to a specific condition, but the research studies themselves have opened countless possibilities that bring growing hope and encouragement.

The virus of rubella or German measles was originally reported from Australia by Gregg[5] in 1941 as being destructively toxic to a pregnant woman during the first trimester. The retarded children born were found to have cataracts, varying degrees of deafness and cardiac malformations. This alerted obstetricians and pediatricians to the vulnerability of the fetus during the first three months. Four or five years ago, I believe, there was an epidemic of rubella in Fort Worth, Texas. The physicians took advantage of this unusual opportunity and checked carefully the reported incidence and subsequently the condition of the baby. They found a much smaller incidence of mental retardation and complications than had been previously reported.

Erythroblastosis fetalis is no longer viewed with alarm—neither by the obstetrician nor the prospective mother. When a routine blood study reveals the presence of Rh negative factors in the mother, both are alerted to the possibilities and know what can and should be done. Sixty years have passed since Landsteiner described the blood types, A, B and O in 1900. It was not until 1940 that Wiener identified the Rh factor. In the same year, Levine and Stetsen were able to demonstrate the phenomenon of iso-immunization. When Wallerstein, in 1946, offered the replacement transfusion as an effective treatment, physicians were in the position to salvage many babies. Children who previously might never have survived did so with no evidence of mental retardation. There is some indication in recent studies that sterility may be associated with incompatibility of blood types of the wife and the husband.

The earliest known and described type of mental retardation is mongolism. Mongoloid children have been studied and reported in almost every corner of the world and among all peoples and races. Twenty to 30 years ago, there was considerable stress laid on the role of the pituitary gland. It was suspected that some fraction of the growth hormone may be absent or become inactive. The impression that the age of the mother is a factor has tended to be confirmed from time to time in the literature. More recently, as the focus of research shifted to metabolic disorders, it was discovered that the mongoloid child excreted an increased amount of beta-amino-isobutyric acid in the urine. This amino acid is involved in the metabolism of the essential amino acid, thymine. It was speculated that this might also indicate an enzyme deficiency. However, this did not turn out to be specific nor consistent enough to justify a prominent place in etiology.

Mittwoch,[6] reporting from London, suggested the hypothesis in 1952 that the mongoloid child may be a chromosome mutation—the result of some mixup in the genes. In 1959, British researchers, Jacob,[7] Lajeune and associates, confirmed this work and found that an additional chromosome was attached to either the fifteenth or twenty-first pair in mongoloid types. Thus, the mongoloid was found to have 47 chromosomes rather than 46 which is considered the normal number. Since an additional autosome is found in leukemia, this may well explain the basis for a higher incidence of leukemia among mongoloid children.

Polani and Carter,[8] reporting on their studies before the International Conference on the Scientific Study of Mental Retardation held in London, described a family of three generations through which the mongoloid genetic pattern was traced. They found that a mongoloid person could possibly have 46 chromosomes—the normal number. Their study involved two sisters, each of whom gave birth to a mongoloid child. One of the children died, but the genetic study traced the chromosome pattern of the surviving mongoloid child through his mother to his grandmother. Evidence points to the possibility of two types of mutations. One might be called true genetic occurring during the germ cell division of the gene. The other mutation is more of a translocation in which a chromosome is switched to another location. This translocation type of chromosome mutation is described in this family with a chromosome of the twenty-first group found displaced to the thirteenth or fifteenth group.

Polani makes an assumption that one of the parents of the maternal grandmother may have produced an abnormal germ cell, which transmitted to the grandmother, could have resulted in four types of zygotes: (1) an unbalanced zygote—probably lethal, (2) a normal individual, (3) a mongoloid, (4) a genetically balanced individual similar to the grandmother.

The two daughters of the mother mentioned were probably in the fourth group and each in turn could have given birth to a mongoloid child, and in this case both did.

They also found that there is a link between the incidence of mongolism and the age of mothers of mongoloids. There is no valid explanation that can relate chromosome anomaly to age. However, Polani has theorized that for some reason the nucleolus in cell structures may disappear only incompletely at the mitotic cell division. This may well constitute a "mechanical" type of interference and be responsible for the translocation of one of the chromosomes. Such research is not only fascinating, stimulating and informative, but opens many additional avenues of rewarding, fruitful investigation.

In the *American Journal of Mental Deficiency* of January, 1961, Forssman, Lehmann and Thysell,[9] reporting from Sweden, described the results of their survey of the number of children born to mongoloid parents or a mongoloid parent. Since 1949, there are only seven unquestionable cases of a mongoloid woman giving birth to a child. There is no report to be found of a mongoloid male fathering a child. Of the seven children born to mongoloid mothers, three were male and four were female. Three of the seven children were mongoloid in type, while the other four showed no evidence of this disorder. One of the children reported in 1959 with no trace of mongoloid features was born in 1954 to a 30 year old mongoloid mother. The father was a blind high-grade mental defective with epilepsy. His condition was apparently due to a cerebral lesion in infancy.

Cytologic studies of the mother, the son and the father revealed the fact that both the father and the 6 year old boy had the normal 46 chromosomes while the mongoloid mother had 47. The authors present an interesting hypothesis. The mitotic pattern in the mother showed a reduction division which in turn adds to every second egg the supernumerary autosome. On this basis, mongolism would result in every second child born of a mongoloid mother.

In the midst of increasing evidence of the significant role of chromosome displacement in the etiology of mongolism, there is a report from Australia giving evidence that there may be an infectious process—possibly a virus—involved. Alan Stoller,[10] in a lecture before the National Institute of Mental Health, described a 16 year survey conducted in the State of Victoria. Births of mongoloids seem to occur in "clusters." This clustering phenomenon evident in 40 per cent of the cases strongly suggested his hypothesis of an infectious basis. Consistently higher rates were found in urban areas where personal contacts were greater. The supposed infectious agent may be active for several months subclinically, and damaging the chromosomes during early mitosis. This study begun in early 1942 and reported in 1958 disclosed an incidence of one mongoloid child in every 688 live births. There were twice as many births of mongoloids occurring in 1944 to 1945 (the years of highest incidence) as compared to 1954 (the year of lowest incidence). His studies confirm the impression that the age of the mother is a factor —the highest rate occurring in women 45 years of age and over. The full story of mongolism is yet to be told, but research as illustrated by the foregoing reports is surely writing some brilliant chapters.

In 1908, a German physician, Van Reuss, described the condition, galactosemia. This is one of the metabolic disorders involving carbohydrate metabolism. It is an enzyme deficiency. Without this enzyme, the child is unable to break down galactose into glucose for utilization. The excess galactose in the tissues and serum is toxic to the developing nervous system. Characteristically, one finds protracted jaundice, enlarged liver, cataracts, with increasing malnutrition. If the child does not die, it survives only to show severe brain damage. Yi-Yong Hsia[11] in the *Journal of Public Health* of November 1960 states that throughout the literature only 75 cases of galactosemia have been reported. This accounts for the sporadic reference and interest to this condition over many years. The renewed interest in inbred metabolic errors that has developed during the last decade has brought this condition into the clinic, laboratory and doctor's office again. When diagnosed by the excessive amount of galactose in the blood and urine, the treatment consists of withholding food which contains galactose. In essence, this means a milk-free diet, and such babies have to be fed milk substitutes. With early detection and prompt treatment, the child has every possibility of thriving and developing into a normal adult.

In 1934, Folling, a Norwegian biochemist, described the urine test by which the presence of phenylpyruvic acid could be detected. This is done by the addition of ferric chloride. The detection of this deaminization product of phenylalanine, an essential amino acid, lead to the recognition of the condition, phenylketonuria. This is an inbred error of metabolism involving the utilization of protein rather than carbohydrate as was discussed previously. It is transmitted as a recessive trait from parent to offspring and occurs in one out of 25,000 of the population. Some 400 cases have thus far been reported in the literature. In state schools where many of the investigations have been conducted, they found an incidence of 0.5 per cent.

These retarded children are fair-skinned and blonde with intelligence in the custodial and trainable range. Most walk but few learn to speak. Deep reflexes are exaggerated and frequently there is a stiff gait with mannerisms and posturing. Among the more serious symptoms are purposeless activity, yelling, screaming, rocking and epileptic seizures. Seizures occur in 25 per cent of the patients, all of whom have abnormal electroencephalograms. Research has probably confirmed more facets of this metabolic disorder than any other. The transmission of this deficiency as an inbred error involves the chromosomes. In the complex nucleic acids which structure the chromosomes are found the precursors of the enzyme needed by the body in the metabolism of the particular amino acid, methylalanine. The enzyme has some relationship to the formation of the pigment melanin which accounts for the fact that practically all patients with phenylketonuria are blonde. In the absence of this enzyme, phenylalanine increases in the bloodstream and in the tissues and breaks down with the formation of phenylpyruvic acid which is considered to be the toxic substance responsible for the progressive damage to the nervous system. Two enzymes have been described in this disorder—one found only in the liver, and the other both in the liver and several other organs of the body. This first enzyme is not present in patients with PKU. On an average, the laboratory test for phenylketonuria becomes conclusively positive six weeks after birth.

Since phenylalanine is an essential amino acid, treatment was unsatisfactory and bordered on frustration until Bickel[12] and his coworkers in England published his experiences with a special diet in 1953. This has now become standard treatment. When instituted during the first few months, there is every likelihood that serious damage to the nervous system will be averted and the child may approximate a normal individual in intelligence.

Diet has been found to be helpful even in older children resulting in improved motor coordination, better contact, greater awareness and a marked decrease in tension and irritability.

This enzyme deficiency being a recessive trait, there are several combinations of progeny that can be born depending upon whether a normal person, a carrier or a case of phenylketonuria is involved. The usual situation which results in the birth of a child with phenylketonuria is found when two carriers are mated. Among four offsprings, one would expect to find one normal, two carriers or heterozygotes, and one child with phenylketonuria or the homozygote.

George A. Jervis[13] in 1959 published his experience with a tyrosine tolerance test which was developed to differentiate the normal sibling from one who was a carrier. Its results seemed to be much more definite than the phenylalanine tolerance test which has been used. An individual who knows he is a carrier of this enzyme deficiency would be forewarned either not to have children or, should a pregnancy occur, to immediately alert the family physician.

Tryptophane is another essential amino acid, having an enzyme deficiency disorder involving its metabolism which is called "H" disease after Hart. The symptoms are mental deterioration, cerebellar ataxia and a pellagra-like rash.

Wilson's disease, or hepatolenticular degeneration, is another hereditary condition in which there is a recessive trait transmitted involving an insufficiency of ceruloplasm in the body. In the absence of an adequate quantity of this protein, the copper which is found in the bloodstream cannot be held in solution and becomes deposited in various organs, particularly in the brain and the liver. Mental deterioration with the more characteristic neurologic signs and symptoms result.

While the foregoing data comprise specific and individual research efforts, it is most encouraging to know that the incidence of malformations, spasticity, mental retardation and other associated defects and deficiencies are now being studied on a major scale. Among these investigations are three which I will describe in greater detail.

The first is an epidemiologic study of reproductive wastage which is being conducted as a two-year pilot project by the State of California, involving the Department of Public Health, the School of Public Health of the University of California and the Department of Obstetrics and Pediatrics of five medical schools in that state.

The focus is on the first trimester of pregnancy. Carefully prepared histories and detailed examinations are being made of 1,000 pregnant mothers through some 10 to 15 clinics. Blood samples are taken regularly and stored. At birth, the obstetrician will make a careful examination. This will be repeated at 1 month, 4 months and 12 months of age. Should the child be born with a congenital malformation, then all the accumulated data will be reviewed in retrospect. Being studied for possible effect are the use of contraceptives, specific infections, severe vomiting, general anesthesia, exposure to radiation, vaginal bleeding and drugs that may have been taken by the mother during the pregnancy. There is really much more data that will be checked than I have indicated at this time. From the two-year pilot project, it is anticipated that a better structure will be developed for a continuing project.

The second investigation is being carried on at the University of Pittsburgh in the Graduate School of Public Health. This is a pilot project under the guidance of Dr. Wishik. The purpose is to develop a feasible methodology to more effectively pinpoint incidents, events and situations which occur during pregnancy regardless how trivial. This involves the use of a daily questionnaire of 61 points on a graded checklist. This method is being used to more easily convert the data to machine administration and machine evaluation. I believe that the Pittsburgh study is one of eight or nine presently sponsored by the United Cerebral Palsy Foundation.

The third major research project is being supervised by the Institute of Neurological Diseases and Blindness of the United States Public Health Service, Dr. Richard Masland, the Director. Dr. Heinz Berendes, Chief of the Perinatal Research Branch, is actively in charge. This is a collaborative, prospective, multi-disciplinary program studying the etiology of fetal loss and other types of pregnancy outcomes with emphasis on central nervous system disease and damage. Fifteen institutions, including both universities and hospitals throughout the country, will be contributing data on 50,000 pregnancies. This will require five years and will cost an estimated $25,000,000. The live-born children in the program will be followed until 7 years of age. Abortions, still-births and deaths occurring will be carefully studied by postmortem examinations. Unfortunately, no hospital nor school in Missouri was included. The conditions to be studied are cerebral palsy, mental retardation, blindness, deafness, behavior problems and other neurologic and sensory disorders of infancy and childhood.

It is a collaborative undertaking because it is inter-institutional as well as inter-disciplinary, involving the departments of genetics, epidemiology, statistics, psychology, psychiatry, sociology, physiology, obstetrics, pediatrics and neurology.

It is prospective as opposed to retrospective. A great deal of socio-economic data will be compiled as well as repeated prenatal obstetrical observations. These will be carried throughout labor, delivery and subsequent observations in the delivery room and nursery. A pediatric examination is set for the fourth month, with psychologic studies at the eighth month. A neurologic examination is scheduled at 1 year, to be followed by a psychologic examination at 30 months and another pediatric at 42 months. The final examination will take place at 72 months or 6 years of age. There will also be controlled experiments and focused studies during this time. (In other words, a study within a study to follow some specific areas of concern.) When this data is all compiled and analyzed, there may be evidence that many factors which heretofore have escaped attention and detection are of positive significance in the cause of many of the conditions described.

Mental retardation, which for so many years has been dealt with with indifference, apathy and resignation, has now become one of the most fertile areas for major research. There is confidence that data will reveal much that will be of value in many areas of specialization in medicine and in the major field of concern—psychiatry. Outstanding and well trained investigators are now devoting their entire efforts to the solution of these perplexing problems. There is no question but that the next generation and succeeding generations may live to enjoy the fruits of all these endeavors.

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J. H. Summers, M.D.

President's Message

The Easter recess of the Congress ended just at the time that this issue of Missouri Medicine was being closed. At the beginning of the recess, there was little indication when Congress will consider bills on eldercare, aid to medical and dental schools and other major subjects of this phase. Some observers feel that these may not come up for serious consideration in this session of the Congress.

This is too precarious a premise for such important matters, not only for the medical profession but for the general public. Many legislators were home during the Easter recess and it is hoped that members of the Association found occasion to talk with them and express their opposition to the Anderson-King bill (S. 909, H. R. 4222). If you did not have the opportunity to talk with your legislators, the next best thing is to contact them by mail and it is urgently suggested that members contact their legislators on this vitally important issue.

Senators, who should be addressed at Senate Office Building, Washington, D. C., are Hon. Stuart Symington and Hon. Edward V. Long.

Representatives, who should be addressed at the House Office Building, Washington, D. C., are, with districts, (1) Hon. Frank M. Karsten, (2) Hon. Thomas B. Curtis, (3) Mrs. John B. Sullivan, (4) Hon. William J. Randall, (5) Hon. Richard Bolling, (6) Hon. William R. Hull, Jr., (7) Hon. Durward G. Hall, (8) Hon. Richard H. Ichord, (9) Hon. Clarence Cannon, (10) Hon. Paul C. Jones, and (11) Hon. Morgan M. Moulder.

J. H. Summers, M.D.

EDITORIALS

DONALD M. DOWELL NAMED PRESIDENT-ELECT

The House of Delegates of the 103rd Annual Session of the Missouri State Medical Association elected Donald M. Dowell, M.D., Chillicothe, as President-Elect. Dr. Dowell will serve as President-Elect during the ensuing year and will be installed as President at the Annual Session in St. Louis, March 18, 19, 20, 21, 1962.

Dr. Dowell became a junior member of the Jackson County Medical Society in 1930, following his internship in the Kansas City General Hospital. He transferred his membership to the Livingston County Medical Society, now a part of the Grand River Medical Society, in 1932. He served as an officer of his county society continuously for a number of years.

Donald M. Dowell, M.D.

He was elected to the Council of the Association in 1947 and was serving as Chairman of the Council at the time of his election as President-Elect. He served as a Vice President of the Association in 1948.

Dr. Dowell was born in Braymer, Missouri, March 19, 1904. His father, George S. Dowell, and three uncles are all M.D.'s. He had his undergraduate college work at Washington University, St. Louis, and received his medical degree from Washington University School of Medicine in 1929. His specialty is surgery.

Dr. Dowell is married to the former Clora Ellen Taylor and they have three children, Betty Don, Patricia Ann and Donald M., II.

Other activities of Dr. Dowell include being Vice Regent and Fellow of the International College of Surgeons; member of the American Academy of General Practice; on the Advisory Board of the University of Missouri School of Medicine; serving on the Board of Directors of the Missouri Cancer Association, and has served as Chief of Staff of the Chillicothe Hospital. He is a member of the Chillicothe Kiwanis Club and Chillicothe Masonic bodies of York Rite, including Moila Shrine Temple. He serves as a Trustee of the Methodist Church. He was a Captain in the Medical Corps, Res. U. S. Army, and served as Surgeon (Major) U. S. P. H. S. in World War II, receiving his discharge in 1944.

THE BEST OF TIMES AND THE WORST OF TIMES

The following editorial, so descriptively titled, is reprinted with permission from the January 1961 issue of *The Nova Scotia Medical Bulletin*:

From time to time one is asked by promising youngsters about medicine as a career. Because it has become fashionable to stress to them certain worrying features of the course medical practice may take in the future, it is not surprising that some are discouraged. They are briefed on the malevolent machinations of all political parties and told how these are aided in many cases by a fifth column health department bureaucracy. The inescapable inference is that this is not a good time to become a doctor.

The fact is, however, that there never was a good time to become a doctor. It was not a good time in the Middle Ages to fight plague with nothing but courage and a few useless simples. Nor was it a good time in the 19th Century to face a lifetime of watching children die from

(Continued on page 488)

unsurpassed "general-purpose" steroid outstanding for "special-purpose" therapy
Aristocort®

in allergic respiratory disorders

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ARISTOCORT Triamcinolone has long since proved its *unsurpassed efficacy and relative safety* in treating allergic respiratory disorders, including bronchial asthma. Clinical evidence has now shown that ARISTOCORT is also highly valuable for "special-problem" patients—asthmatic and others—who, because of certain complications, were hitherto considered poor candidates for corticosteroids.

for example:

PATIENTS WITH IMPENDING CARDIAC DECOMPENSATION

In contrast to most of its congeners, ARISTOCORT is not contraindicated when edema is present or when cardiac decompensation impends.[1]

PATIENTS WITH EMOTIONAL AND NERVOUS DISORDERS

Triamcinolone did not produce psychic disturbances or insomnia.[2]

PATIENTS WHOSE APPETITES SHOULD NOT BE STIMULATED

Among patients treated with ARISTOCORT, there was less appetite stimulation, especially in those who had previously gained weight on long-term therapy with other steroids.[3]

PATIENTS WITH HYPERTENSION

There was no blood pressure increase in any patient treated for bronchial asthma, and in some, blood pressure fell. Of these, three had been hypertensive.[4]

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Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of allergic respiratory disorders, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

Supplied: Scored tablets—1 mg. (yellow); 2 mg. (pink); 4 mg. (white); 16 mg. (white).
Also available—syrup, parenteral and various topical forms.

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EDITORIALS—Continued

diphtheria. Nor as a surgeon of little more than a hundred years ago to operate without anesthesia and see half of one's patients die of infection. Coming closer to our own time, few of us would be happy at the prospect of fighting Spanish influenza with aspirin, poultices and despair. The men who did these things were not influenced by circumstances, good or bad, but did what they had to do, as best they could, because they were doctors.

We would be simple to believe that doctors in all ages have not shared the frailties and wickedness of all mankind in full measure. At the same time there is a common denominator which the doctor of today shares with all the doctors who went before him and who will come after him. It is an infelt need, a kind of compassion perhaps, which compels one kind of man to help all other men. This need will manifest itself whether he is ruled by the Pharaohs or the C.C.F. and will outlive both.

Today, the newest doctor can conquer diseases that twenty years ago were beyond the skill of the greatest physician in the land. Doors locked since the world was born are opening to him on every side. And at the end neither principalities nor powers, nor interfering socialist states, nor all Hell can separate a doctor from the patient who needs him.

At last year's intern graduation one of the speakers remarked to the effect that he had believed that he envied no man on earth but he found that he envied every new doctor standing before him. Few would disagree.

The worst of times? Perhaps. The best of times? Yes. W. E. P.

MEDICAL-LEGAL INSTITUTE TO BE HELD

A Medical-Legal Institute on Criminal Cases will be held at the Law Center of the University of Kansas City May 19 and 20. The institute is sponsored by the Law Center and the Division for Continuing Education of the University.

Participants will be Dr. Russell S. Fisher, Chief Medical Examiner for the State of Maryland; Joseph T. Powers, Senior Trial Deputy, Office of the District Attorney, Los Angeles County, California; and Victor H. Blanc, Judge, Court of Common Pleas, Philadelphia, Pennsylvania.

The institute will be directed by Duane R. Nedrud, Assistant Professor of Law at the University, and Angelo Lapi, M.D., Kansas City.

The program will include methods of investigation and preparation for trial of actual homocide cases, a mock trial designed to portray the pathologist as a witness and a panel discussion on the role of the pathologist in the investigation and trial of criminal cases other than homicide. The program will be concluded with an open forum on the subject, "Should a Medical Examiner System Be Adopted?"

ST. LOUIS ACADEMY TO HOLD SPRING SYMPOSIUM

The Sixth Annual Spring Scientific Symposium of the St. Louis Academy of General Practice will be held on Sunday, May 7, at the Chase Hotel. This annual symposium is one of the Academy's most popular events and has been well attended by the medical profession in Greater St. Louis and surrounding area. In addition to the cocktail party and dinner in the evening, there will be entertainment and cards for the ladies in the afternoon.

Outstanding speakers have been obtained for this perennial combination of education and entertainment. Edward T. Krementz, M.D., Associate Professor of Surgery, Tulane University, will speak on "The Perfusion Treatment of Patients With Cancer." "Mental Health and the Family Doctor" will be discussed by James N. Sussex, M.D., Chairman of the Department of Psychiatry at the Medical College of Alabama. "The Emotional Problems of Teen-agers" will be expounded by George A. Constant, M.D., Director of Pediatric Psychiatry at the University of Texas Medical School. Alex J. Steigman, M.D., Chairman of the Department of Pediatrics at the University of Louisville, will delineate "Therapy in Virus Disorders." "The Spoiled Brat—The Problem Parent" will be explained by Edward M. Liten, M.D., Consultant in the Section of Psychiatry at the Mayo Clinic.

This program is acceptable for 4½ hours of Category I credit by the American Academy of General Practice.

The usual large attendance is expected for this combined scientific program and social event in which both the doctor and his wife may participate.

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Ramblings of the Field Secretary

The unique and highly successful Greater Kansas City Health Fair, March 18-26, 1961, held at the Municipal Auditorium, will long be remembered as one of the most interesting and well received health education projects, for public consumption, ever presented in this area. This great exhibition was the outcome of more than two years work of the Jackson and Clay County Medical societies in Missouri and the Wyandotte and Johnson counties in Kansas cooperating with dental societies, area hospitals, medical schools, military forces, governmental agencies, research centers and other groups in the medical and paramedical fields to develop a gigantic showcase concerning health. New frontiers in health progress and new horizons in health careers were depicted and, in many instances, dramatically displayed, in the 200 Health Fair exhibits.

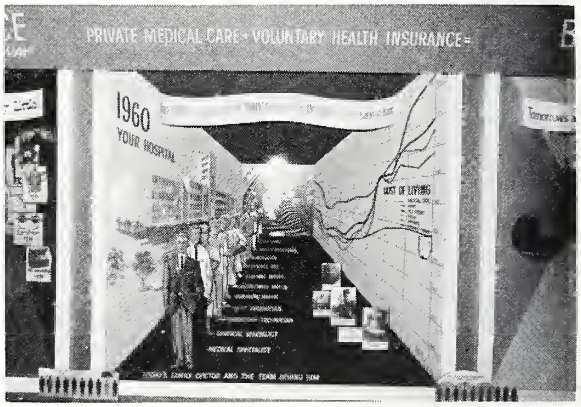
PROJECT
MSMA

M.S.M.A. exhibit at the Health Fair.

Exhibits drew attention.

Thousands of school children viewed the exhibits, free, via pre-scheduled conducted tours. Adults were charged one dollar. All proceeds go to the nonprofit, now famous Medico, Inc., established by the late Dr. Thomas A. Dooley, Jr., and Dr. Peter D. Comanduras.

The Missouri State Medical Association presented an exhibit entitled "Project M.D." It was designed to show definite action programs of the MSMA to increase the number and distribution of physicians in Missouri. These included: Physicians Placement Service, Medical Student Loan Fund, Preceptorship program with Missouri University Medical School and other close working relationships to secure more physicians for Missouri. The exhibit was manned, throughout the fair, by medical students from the University of Missouri.



Cost of living vs. medical care was shown in one exhibit.

Many excellent exhibits from the A.M.A. were shown, including the plastic twins, "Life Begins," "Your Glands," "Food Fads" and "Mechanical Quackery." Well designed exhibits on health insurance and increased costs of medical care

Dr. Hungate made presentation to Mrs. Dooley.

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When you prescribe Trancopal, you can prevent "oversplinting." Trancopal will relax the spasm, ease the pain and get the muscle working again. Relaxation generally begins within half an hour, and the effects of one tablet last from four to six hours.

In addition to relaxing the muscle, Trancopal will mildly tranquilize the patient, reducing the restlessness and irritability that so often accompany discomfort. With Trancopal, the patient can soon start purposeful exercise and physical therapy.

Trancopal has been found very effective in the treatment of patients with low back pain (lumbago), neck pain (torticollis), bursitis, fibrositis, myositis, ankle sprain, tennis elbow, osteoarthritis, rheumatoid arthritis, disc syndrome and postoperative muscle spasm. Trancopal is available in 200 mg. Caplets® (green colored, scored) and in 100 mg. Caplets (peach colored, scored), bottles of 100.

Dosage: Adults, 1 Caplet (200 mg.) three or four times daily; children (5 to 12 years), from 50 to 100 mg. three or four times daily.

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versus increased living costs were presented. One of the most popular displays had to do with space which was offered by the cooperative endeavor of the U. S. Air Corps and the Navy. Local health promotion groups were also much in evidence with attractive exhibits including many on health careers.

On Friday night, March 17, a fitting "kick-off" of the Health Fair was held at the Muehlebach Hotel. This took the form of a citation dinner sponsored by the physicians of Greater Kansas City. On this occasion a Distinguished Service Citation was awarded posthumously to Thomas A. Dooley, Jr., M.D., and presented to his mother, Mrs. Thomas A. Dooley of St. Louis, by Dr. Carroll P. Hungate, Kansas City, Chairman, Policy Committee of the Greater Kansas City Health Fair.

Presentations of Certificates of Achievements to local area science fair winners were made by E. Vincent Askey, M.D., President, A.M.A.; R. O. Muether, M.D., President, MSMA, and F. E. Wrightman, M.D., President, Kansas State Medical Association.

The main address of the evening was given by Peter D. Comanduras, M.D., co-founder and Secretary-General, Medico, Inc.

"Hats Off" to the physicians of the Greater Kansas City area for their tremendous contribution in time and effort in making possible a true milestone, the 1961 Greater Kansas City Health Fair.

Missouri Medical Meetings

University of Missouri School of Medicine, Spring Clinical Conference, Columbia, May 11, 12, 1961.

American Medical Association, New York City, June 26-30, 1961.

Kansas City Southwest Clinical Society, Kansas City, Sept. 18, 19, 20, 1961.

Missouri Academy of General Practice, 13th Annual Assembly, Muehlebach Hotel, Kansas City, November 4, 5, 1961.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—fourth Tuesday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—third Tuesday or each month.

Franklin-Gasconade-Warren County Medical Society—first Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—March, May, October and December.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets third Friday of each month.

Johnson County Medical Society—meets only on call.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month. 7:30 p.m.

Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)—fourth Thursday of each month.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Nodaway-Holt-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—third Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Webster County Medical Society—meets only on call.

West Central Missouri Society (Bates-Cass-St. Clair-Vernon-Cedar)—second Thursday of each month.

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STUDY 2 *Lubowe, I. I.: Western Med. 1:45, 1960.*

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STUDY 3 *Weissberg, G.: Clin. Med. 7:1161, 1960.*

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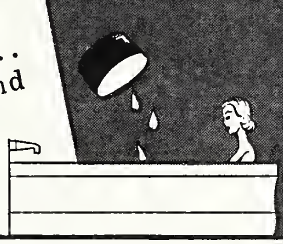
- atopic dermatitis
- senile pruritus
- contact dermatitis
- nummular dermatitis
- neurodermatitis
- soap dermatitis
- ichthyosis



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News—Personal and Professional

The Kansas City Radiological Society elected **Lewis G. Allen**, M.D., Kansas City, president at a meeting in February.

Guest speaker at the seventh anniversary dinner of the Northeast Missouri Medical and Dental Assistants held at Hannibal was **Vernon E. Wilson**, M.D., Columbia, who spoke on "The Team Approach."

At the organizational meeting of a 50 year Club of members of the Association, held in Kansas City during the Annual Session, **Helmuth H. Kramolowsky**, M.D., St. Louis, was elected president, and **C. L. Lawless**, M.D., Marshall, was named secretary.

"To Smoke or Not to Smoke" was the title of a film presented and discussed by **Ned D. Rodes**, M.D., Mexico, at a meeting of the Audrain County Board of the American Cancer Society.

The National Foundation has announced that **C. Gordon Stauffacher**, M.D., Sedalia, has been appointed a member of the National Foundation's Health Scholarship Committee for Missouri.

One of four business and professional men honored as outstanding young Missourians by the Missouri Junior Chamber of Commerce was **Robert L. Magee**, M.D., Eldorado Springs.

A recently elected director of the Kansas City Rehabilitation Institute is **Robert H. Fitzgerald**, M.D., Independence, who recently was presented a certificate for voluntary work in the institute's amputee clinic.

The Central Missouri Medical Secretaries and Assistants Society, meeting in Moberly for a monthly meeting, had as speaker **J. Will Fleming**, M.D., Moberly.

The Callaway County Medical Society honored **R. N. Crews**, M.D., Fulton, in celebration of his 65th year in the practice of medicine at a dinner at the Fulton Country Club on March 15.

The Woman's Auxiliary of the Saline County Medical Society had as speaker at an open meeting of the Monday Club on March 13, Mr. Oliver Field of the American Medical Association. Mr. Field spoke at the meeting of the Marshall Lions Club at noon.

Recently elected officers of the medical staff of the Children's Mercy Hospital, Kansas City, are **John H. Mayer**, M.D., president; **C. Y. Thomas**, M.D., vice president, and **C. Laurence Johnson**, M.D., secretary.

The Missouri State Surgical Society, at a meeting in Kansas City on March 20, installed **Avery P. Rowlette**, M.D., Moberly, as president. **Ralph R. Coffey**, M.D., Kansas City, was elected president-elect, and **John A. Growdon**, M.D., Kansas City, was reelected secretary.

Speaker at a meeting of the Samaritan Hospital medical staff at Macon this spring was **Grafton A. Smith**, M.D., Columbia.

Among speakers at the Clinical Congress of Surgeons held in Miami in February was **Roland T. Smith**, M.D., Joplin. His subject was "The Physiological and Anatomical Basis of Peptic Surgery."

The Boone County Republican Women's Club had as speaker at a meeting in late February **Durward G. Hall**, M.D., Springfield, congressman from the Seventh District.

C. Souter Smith, M.D., Springfield, has been nominated by the executive committee of the Missouri United Church Women as representative to the National Board of United Church Women.

The medical staff of Lutheran Hospital, St. Louis, recently installed **Paul M. Parashak**, M.D., as president. Other officers installed were **Morris**

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Herman, M.D., vice president; **Donald T. Behrens,** M.D., secretary-treasurer. **H. V. Hoefer,** M.D., was elected president-elect.

"Modern Medicine Looks at the Heart" was the subject of a film and talk given by **Carl G. Popp,** M.D., Sikeston, before a recent meeting of the Sikeston Kiwanis Club.

NEW MEMBERS

Robert L. Bolton, M.D., 3947 Jamieson Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Bolton is a native of Montana, received his preliminary education in St. Louis, and his M.D. degree from St. Louis University School of Medicine in 1956.

G. Robert Bowles, M.D., 5525 Enright Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Bowles is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University in 1957.

Edwin E. Carter, M.D., 6500 Chippewa St., St. Louis, has become a member of the St. Louis County Medical Society. Dr. Carter is a native of Arkansas, received his preliminary education in Connecticut, and his M.D. degree from Washington University in 1954.

Clarence L. Clark, M.D., 95 Pebblebrook Lane, St. Louis, has become a member of the St. Louis Medical Society. Dr. Clark is a native of New York, received his preliminary education in Connecticut, and his M.D. degree from St. Louis University in 1940.

Charles W. Griege, M.D., 525 St. Francios St., Florissant, has become a member of the St. Louis Medical Society. Dr. Griege is a native of New York, received his preliminary education in New York, and his M.D. degree from Columbia University in 1955.

John J. Lang, M.D., 5455 Delmar Blvd., St. Louis, has become a member of the St. Louis Medical Society. Dr. Lang is a native of Missouri, received his preliminary education in Missouri and his M.D. degree from St. Louis University in 1957.

Lawrence N. McCullough, M.D., 9414 Laguna Drive, St. Louis, has become a member of the St. Louis Medical Society. Dr. McCullough is a native of Texas, received his preliminary education in Louisiana, and his M.D. degree from Tulane University in 1950.

Frederick D. Peterson, M.D., 8225 Clayton Road, St. Louis, has become a member of the St. Louis County Medical Society. Dr. Peterson is a native of Missouri, received his preliminary education in Illinois, and his M.D. degree from Washington University in 1957.

James B. Seeley, M.D., 1808 W. Main St., Blue Springs, has become a member of the Jackson County Medical Society. Dr. Seeley is a native of Michigan, received his preliminary education in Michigan and his M.D. degree from the University of Michigan in 1916.

Gordon Shaw, M.D., Mexico, has become a member of the Audrain County Medical Society. Dr. Shaw is a native of Canada, received his preliminary education in Canada, and his M.D. degree from Toronto University in 1953.

Nathan M. Simon, M.D., 1417 Yale Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Simon is a native of Deleware, received his preliminary education in Connecticut, and his M.D. degree from Washington University in 1955.

James C. Strittmatter, M.D., 400 Carelton Ave., Caruthersville, has become a member of the Pemiscot County Medical Society. Dr. Strittmatter is a native of Kentucky, received his preliminary education in Kentucky and his M.D. degree from the University of Tennessee in 1959.

Donald B. Strominger, M.D., 950 Francis Place, St. Louis, has become a member of the St. Louis Medical Society. Dr. Strominger is a native of New York, received his preliminary education in Connecticut, and his M.D. degree from Washington University in 1953.

Henry A. Sydow, M.D., 1201 Grand Ave., Fulton, has become a member of the Callaway County Medical Society. Dr. Sydow is a native of Nebraska, received his preliminary education in Nebraska, and his M.D. degree from the University of Nebraska in 1939.

Edward R. Tellez, M.D., 207 Lynn Ave., Fulton, has become a member of Callaway County Medical Society. Dr. Tellez is a native of Cuba, received his preliminary education in Cuba, and his M.D. degree from the University of Havana in 1946.

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County Society News

FIRST DISTRICT

JOSEPH L. FISHER, ST. JOSEPH, COUNCILOR

Buchanan County Medical Society

Colonel Joseph T. Capples, Chief of Surgery and Commanding Officer of the new Munson Army Hospital at Ft. Leavenworth, Kansas, spoke at the March 1 meeting of the Buchanan County Medical Society on "Medical Mobilization."

The speaker pointed out that St. Joseph, though fortunately not a prime target for enemy attack, would have the responsibility for taking care of casualties in case of a catastrophe in Kansas City or Omaha. Whether a disaster occurred by enemy attack, man made or natural causes, the medical profession should properly take the lead in caring for the casualties. Colonel Caples suggested further planning for possible use of the emergency mobile 200 bed hospital provided by Civil Defense authorities in St. Joseph. In addition to medical care in event of a catastrophe, there should be planning to reestablish communications, for a new source of water supply, transportation, food, shelter and a host of other emergency services.

The speaker was introduced by Dr. Winton T. Stacy. Dr. Judson M. Hughes, president, presided at the meeting.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

A meeting of the Grand River Medical Society and the doctors' wives was held at the Strand Hotel in Chillicothe on Thursday night, March 9. In observance of Doctor's Day each member received a red carnation from his wife. Following a social hour and a tasty smorgasbord, all present enjoyed a special musical program presented by the "Melody-Moms," after which the Auxiliary departed for a separate program.

William D. Gaunt, M.D., Assistant Professor of Medicine at the University of Missouri Medical School, presented the scientific program of the evening. He discussed at length the diagnosis and treatment of arthritis with particular emphasis on the use of lower doses of steroids.

Due to the length of the entire program, the business session was cut short and included only discussion on specific legislation pending in the Missouri Legislature.

Guests present were: Dr. and Mrs. William Gaunt, Columbia; Mr. and Mrs. Pickell, Brookfield; "Melody-Moms"—Mrs. David Fruin, Mrs. Peggy Price, and Mrs. Peggy Jeffries; and representatives of Squibb and Eaton Drug Companies.

Frank R. Daley, M.D., *Secretary*

SECOND DISTRICT

A. P. ROWLETTE, MOBERLY, COUNCILOR

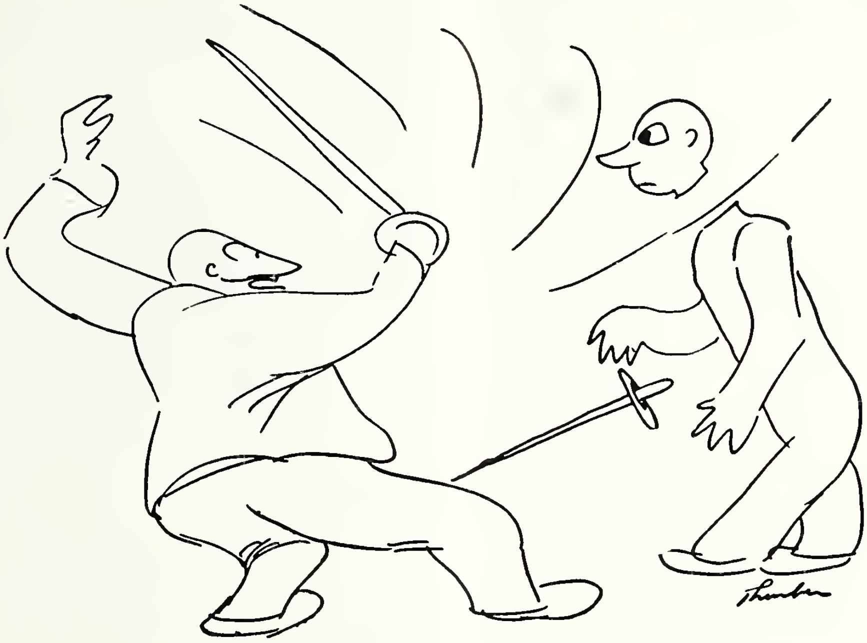
Chariton-Macon-Monroe-Randolph County Medical Society

The March meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held Thursday evening, March 9, at the Woodland Hospital in Moberly. Following a bountiful dinner, those present were privileged to hear an interesting and informative scientific discussion by David Morgan, M.D., dermatologist of Kansas City.

Among the many skin disorders discussed by Dr. Morgan were the following: skin conditions caused by the brown spider bite; treatment of alopecia by a new technic of injecting a special steroid; newer treatment of fungus infection of the skin, nails and hair by the use of griseofulvin; removal of skin tumors in ways to minimize noticeable scar.

During the business part of the meeting the intercollegiate debate topic for this year was discussed. The topic is, "Resolved: That the United States should adopt a program of compulsory health insurance for all citizens." Information had been received from the National Association of Blue Shield Plans offering kits of background materials to any high school or college debate group taking the negative side of the debate topic. For this information address the National Association of Blue Shield Plans, 425 North Michigan Avenue, Chicago, Illinois. A short memorial service by the Society was held for Dr. L. K. McMurtry, a Society member and former Moberly Wabash Hospital surgeon, who died February 28.

Those present at the meeting were: Drs. C. C. Cohrs, C. C. Smith, Stanley R. Szymanski, J. Will Fleming, Jr., Thomas S. Fleming, A. P. Rowlette, Robert H. Young, W. D. Chute, Josephine Baker, L. E. Huber and Robert Hasson, Moberly; James



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J. W. Fleming, M.D., *Secretary*

FOURTH DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society met on February 28 at 8:00 p.m. at Jefferson Memorial Hospital with the following doctors present: Drs. J. L. Mayfield, J. F. Rutledge, E. J. Senn, R. H. Allbee, K. V. McKinstry, H. E. Donnell, C. F. Rice, H. Yoskit, W. T. Judge, F. L. Kozal and Paul Whitener.

Dr. Eugene Bricker gave an interesting lecture concerning all the aspects of his surgical reconstruction of the urinary bladder following pelvic exenteration. His talk was illustrated with slides and a complete motion picture showing the operation from the beginning to the end. The program was especially well appreciated by the members present.

Dr. Whitener then briefed the Society on matters pertaining to the coming state meeting in Kansas City.

The meeting was closed as usual with refreshments served by the kitchen staff of the hospital.

F. L. Kozal, M.D., *Secretary*

SIXTH DISTRICT

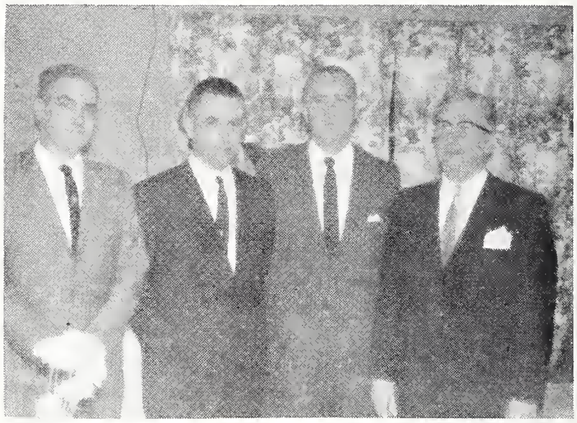
O. B. BARGER, COUNCILOR, HARRISONVILLE

Henry, Johnson, Pettis, Lafayette-Ray, Saline County Medical Societies

A joint dinner meeting of the Henry, Johnson, Pettis, Saline, and Lafayette-Ray County Medical Societies and the doctors' wives was held at the Country Club in Clinton, on Wednesday evening, March 29. The evening festivities began with a social hour followed by an excellent smorgasbord and then the program.

More than 50 people were present to hear an interesting and informative program presented by officers and members of the Board of Directors of Kansas City Blue Shield. The discussion considered points of relationship between the medical profession and Blue Shield. The year 1961 purports to be a most important one from the standpoint of the economics of health care in the United States. This particular program was indeed timely.

The program took the form of a panel discussion with Mr. Tom Collins, Director of Kansas City Blue Shield Professional Relations, as moderator. Participants on the panel were: Mr. J. R. McConnell, Director, Kansas City Blue Cross-Blue Shield Claims Department; Ira Layton, M.D., First Vice President, Kansas City Blue Shield; Ray Stockton, M.D., Member, Physicians Relations Committee; and Mr. Richard Henges, Member, Board of Directors, Kansas City Blue Shield.



Speakers at the meeting were Mr. McConnell, Dr. Layton, Dr. Stockton and Mr. Henges of the Kansas City Blue Shield.

Following brief remarks by each member of the panel, questions from the audience were received and answered. Following this program, it is practical to recommend that similar programs may prove most beneficial to other medical society meetings over the state. Those attending this important session were guests of Kansas City Blue Shield for dinner. The Henry County Medical Society was pleased to serve as host for this important occasion.

Ray Hollingsworth, M.D., *Secretary*

EIGHTH DISTRICT

DOYLE C. McCRAW, BOLIVAR, COUNCILOR

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held Friday, February 24, at Galli's Half-A-Hill with 55 members and three guests present.

The president, Dr. John P. Ferguson, presided. Members and guests were recognized by the president. The minutes of the annual business

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meeting of the Society were approved as published in the *Bulletin*.

Dr. Ferguson reminded the members of the March 19-22, 1961 Annual Session of the Missouri State Medical Association to be held at Hotel Muehlebach, Kansas City, urging members of the Society to financially support the Greene County suite at this meeting.

Mr. Owen Alford, District Representative for Blue Cross-Blue Shield, discussed with the members the advantages and importance of maximum participation in the medical society group coverage under these plans.

The nominating committee presented the following report: "Mr. President and members of the Greene County Medical Society—following notification of the society by the Missouri State Medical Association that we are entitled to a fourth Delegate to represent our organization at the 1961 Annual Session, and upon instruction of the president of this Society, your nominating committee is pleased to place in nomination the name of Dr. F. T. H'Doubler, Jr., as Delegate and the names of Drs. E. M. Powell and William H. Snead as Alternate Delegates. (It is necessary to name two additional Alternates since Dr. H'Doubler currently serves as an Alternate Delegate.)

"This will make our Delegate and Alternate Delegate representation from Greene County stand as follows: Delegates, Stanley S. Peterson, M.D., John P. Ferguson, M.D., Kenneth E. Knabb, M.D., F. T. H'Doubler, Jr., M.D. Alternate Delegates, G. B. Lemmon, Jr., M.D., E. M. Powell, M.D., Harry D. Silsby, M.D., William H. Snead, M.D."

The report was signed by Drs. E. J. Schwartz, Ronald F. Elkins, Joseph G. Siceluff, Thomas E. Ashley, Edwin M. Powell and G. Bruce Lemmon, Jr.

Dr. Ferguson called for additional nominations from the the floor; there being none, upon motion to close nominations, waive the by-laws and elect the slate nominated by the Committee, there was a unanimous vote.

Dr. Ferguson then presented Dr. Stanley S. Peterson, Chairman of the Missouri State Medical Association Committee on Aging, and President-Elect of this Society. He discussed the "White House Conference on Aging."

Following Dr. Peterson's presentation, Dr. Ferguson expressed appreciation to him for his discussion and his work and interest in this matter.

Greene County Delegates to the Missouri State Medical Association Annual Session, Drs. Kenneth E. Knabb, Stanley S. Peterson, F. T. H'Doubler, Jr., and John P. Ferguson, discussed resolutions to be presented at that meeting from Greene County Delegates and others in this district. The resolutions entitled "Missouri State Medical Association Public Service Program," "Image of the American Medical Association," "NBC Discussion Guide," were approved unanimously as presented by the delegates and as had been previously endorsed by the council. The resolution entitled, "Recommendations of the Council and Committees on Medical Economics and Aging on Implementation of Kerr-Mills Law" as presented by the Delegates and endorsed by the council, was approved by the membership by vote of 23 to 5. The resolution entitled "Payment of Physicians Under Government Financed Program for the Indigent" was approved, one member voting against approval.

Dr. Walter W. Tillman, Jr., 8th District Councilor of the Missouri State Medical Association, briefly discussed legislation currently in the state legislature. Dr. Ferguson announced that the March 24 regular meeting of the Society will be a report by the Delegates on action taken at the Annual Session of the Missouri State Medical Association.

There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

Jasper County Medical Society

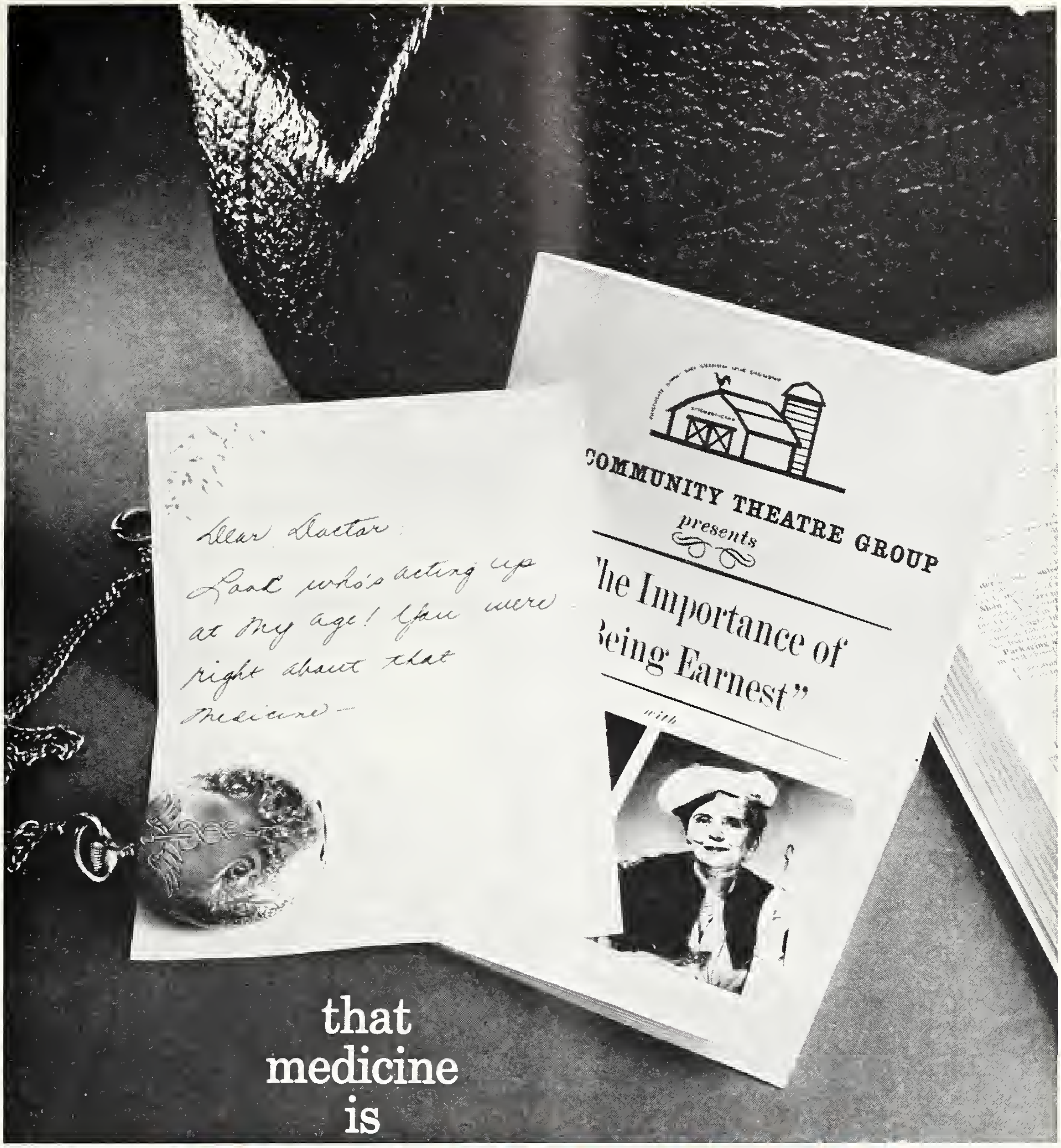
The regular meeting of the Jasper County Medical Society held on March 14, at the Drake Hotel, Carthage, was called to order by the president, Frank H. Birsner, M.D., with 28 members present.

At the request of the president, the executive secretary read the minutes of the regular meeting of the Council held on January 24. Upon motion made by Dr. R. R. Cohle and seconded by Dr. G. A. Schulte, the Society by majority vote approved the following resolution adopted by the council at its regular meeting January 24, 1961:

Whereas, It appearing from the report of the committee appointed to study annual costs of the Society that expenditures for the year 1960 exceeded current income by the sum of $1,102.30, and it further appearing to the council that expenditures for the year 1961 may exceed current income by a like sum; be it

Resolved, That a special assessment of $30.00 per member be levied to become due and payable April 1, 1961, and be it further

Resolved, That this resolution be submitted to



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a vote at the regular meeting of members of the Jasper County Medical Society to be held on Tuesday, March 14, 1961.

The executive secretary then read the announcement of Mr. Glenn E. Gavin, area enrollment representative of Blue Cross-Blue Shield, advising all members of the Jasper County Medical Society who are not presently enrolled in Blue Cross and Blue Shield that the group is now opened for enrollment until March 27, 1961. Upon motion of Dr. Paddock, which was duly seconded, the following resolution was unanimously carried:

> *Resolved*, That those members of the Society who want Blue Cross and Blue Shield or who want Blue Cross preferred and Blue Shield preferred, may have it through the Jasper County Medical Society group.

The Society then conducted a general discussion concerning various matters likely to come before the annual meeting of MSMA at Kansas City beginning March 19. The Society's delegates and alternates were instructed as follows:

1. That the proposed resolution of Greene County Medical Society concerning Vendor Bill be supported.
2. That the proposal for full implementation of Kerr-Mills law by the Missouri Legislature be supported.
3. That the delegates make known to the annual meeting that the Society takes the position that a district councilor should serve not more than three consecutive terms.
4. That the delegates support a public service program for the Missouri Medical Association.

The president then requested the executive secretary to read the following slate of names for elective offices of the Society nominated by the Council and the Board of Censors pursuant to Section 3, Chapter II of the by-laws: President, John W. Koehler, M.D.; president-elect, G. A. Schulte, M.D.; vice president, M. Foster Whitten, M.D.; secretary, D. O. Allen, M.D.; treasurer, O. T. Blanke, M.D.; council, M. F. Hall, M.D., Norman Barnett, M.D.; censor, Frank H. Birsner, M.D.; delegates, M. Foster Whitten, M.D., G. A. Schulte, M.D.; alternates, R. R. Cohle, M.D., Virgil Jeans, M.D.

Upon motion duly made and unanimously carried, the persons so nominated were elected to their respective offices by acclamation.

There being no further business to come before the meeting, upon motion duly made and carried, the meeting was adjourned.

David Allen, M.D., *Secretary*

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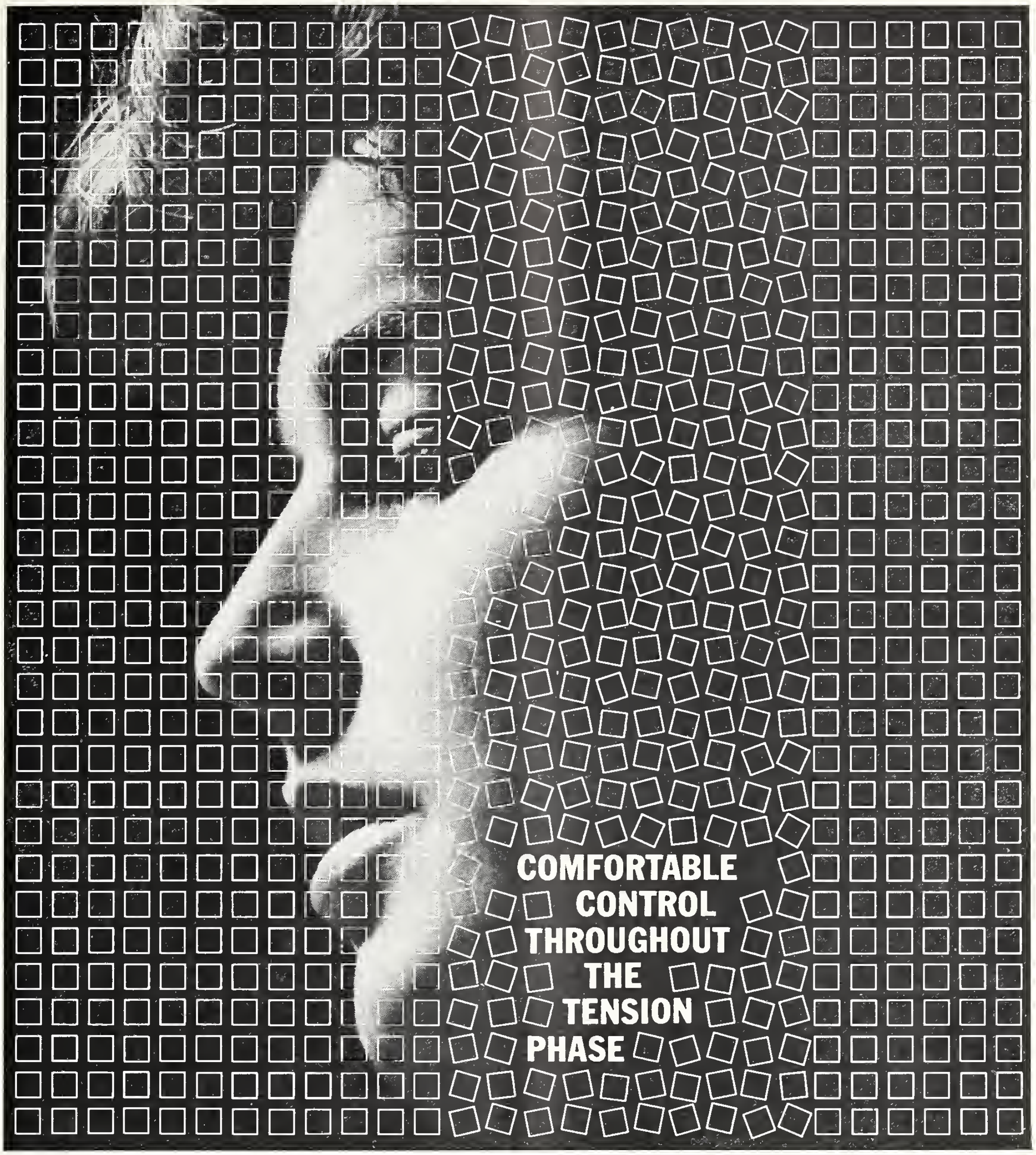

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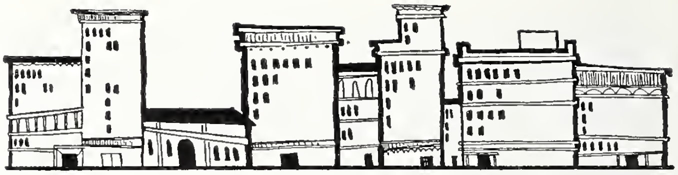
From the Medical Schools



UNIVERSITY OF MISSOURI

Meetings

Four scientific papers by staff members of the departments of horticulture and microbiology and the School of Veterinary Medicine at the University of Missouri were presented at the spring meeting of the Eastern Missouri Branch, Society of American Bacteriologists, in the Medical Center Auditorium March 25.

The meeting was sponsored by the department of microbiology of the School of Medicine. Three members of the department are officers of the Eastern Missouri Banch. They are Dr. James T. Barrett, associate professor of microbiology, vice president; Dr. Herbert S. Goldberg, associate professor of microbiology, secretary-treasurer; and Dr. Frank B. Engley, Jr., professor of microbiology and chairman of the department, national councilor. Dr. Alexander C. Sonnenwirth of St. Louis is president.

Papers presented by medical center staff members are: "Stimulation of Pseudomonas Pigment and Fluorescence," by Dr. Engley and Miss Dorothy L. Breiner, research assistant in microbiology; and "Interference Between Homologous Viable Viruses," by Dr. Donald P. Durand, assistant professor of microbiology.

A conference for nurses employed by industries in Missouri was held at the University of Missouri March 3-4, with "Positive Health in Industry" as the main theme. The conference was sponsored by the School of Nursing and the Continuing Education Service of the University in cooperation with the industrial nurses in Missouri. The program for the Industrial Nurses Conference included a dinner at 7:00 p.m. March 3 at the Tiger Hotel, and a luncheon March 4 in the Student Union. David Davis, M.D., assistant professor of psychiatry at the medical center, was guest speaker at the luncheon. There was a tour of the medical center the morning of March 3.

Dr. Hugh E. Stephenson, Jr., professor of surgery in the School of Medicine, addressed a meeting of Sigma Xi, science research society, at 8 o'clock in the medical center auditorium. His lecture, "Observations on the Pattern of Obstruction in Coronary Artery Disease," was illustrated with slides and motion pictures.

Robert L. Jackson, M.D., professor of pediatrics and chairman of the department at the School of Medicine, presented a talk on "The History of Infant Feeding" at 8:00 p.m. March 30 in the Medical Sciences Building. The program was sponsored by the Medical History Group of the University.

Visitors

Dr. Roger D. Reid, director of the Biological Sciences Division, Office of Naval Research, Washington, D. C., spoke on "Progress of the Biological Sciences Program of the ONR" at 4:00 p.m. March 24 in the Medical Center auditorium.

On March 25, Dr. Reid spoke before a luncheon session of the Eastern Missouri Branch of the American Society of Bacteriologists at the Memorial Student Union. His topic was "Biology —A Weapon for Peace." Also on March 25 he lectured before the second year student class in public health and preventive medicine on biological warfare defense.

Dr. Reid has been director of the Biological Sciences Division since 1957. Before that he was head of the microbiology branch of the Office of Naval Research from 1948 through 1957.

Appointments

Miss Muriel Gladys Dayhoff was recently appointed associate professor of nursing at the University of Missouri. She is responsible for the public health nursing part of the Nursing Education Program in the University School of Nursing. This includes coordinating field agencies for Public Health Nursing experience of students. A native of Kansas, Miss Dayhoff received her R.N. from Stormont Training School for Nurses in Topeka, Kan., in 1939; her A.B. degree from Baker University, Baldwin, Kan., in 1944; and her Master of Public Health degree from the University of Minnesota, Minneapolis, Minn., in December, 1960.

Dr. J. M. Martt, associate professor of medicine, was recently elected to the Fellowship A.C.P. He will attend the initiation and convocation in Miami, Florida, May 8 to 12.

Publications

The American Institute of Biological Sciences (AIBS) has just published a book titled "High

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School Biology—Biological Investigations for Secondary School Students." This is a compilation of research projects submitted by research scientists in education, government and industry. The AIBS Committee on the Gifted Student and Biological Sciences Curriculum Study group examined these research topics for use by advanced high school students. Of the projects, one contributed by Dr. James T. Barrett, associate professor of microbiology, has been accepted. The project suggested by Dr. Barrett is titled "Amino Acid Production by Microorganisms."

Gifts and Grants

Dr. David Davis, assistant professor of psychiatry in the School of Medicine, has been appointed a Teaching Fellow of the American Fund for Psychiatry for the academic year 1961-62 it has been announced. The appointment carries with it a grant of $4,000 to the University by the American Fund for Psychiatry, the grant to be used in support of a new teaching program in social psychiatry for medical students of the School. The program is under the direction of Dr. Davis.

Teaching Fellowship appointments with accompanying grants are made by the American Fund for Psychiatry to support outstanding young psychiatrists in careers in teaching and research; and to assist in the development of investigative and training psychiatric programs as a means of finding solutions to the major health problem of mental illness. Dr. Davis' appointment as a Teaching Fellow is one of six made by the American Fund for Psychiatry to teachers of psychiatry nominated by medical schools throughout the United States.

Trips and Talks

Dr. Vernon E. Wilson, dean and director of the School of Medicine and University Hospital, was one of several speakers on health careers at the Kansas City Health Fair at the Municipal Auditorium in Kansas City, Mo., March 21. Dr. Wilson spoke on medicine as a career—explaining the background that it needs and the advantages of a medical career. A discussion period followed the talk. High school students and other interested persons attended the Fair.

Dr. Wilson also was a participant on a panel

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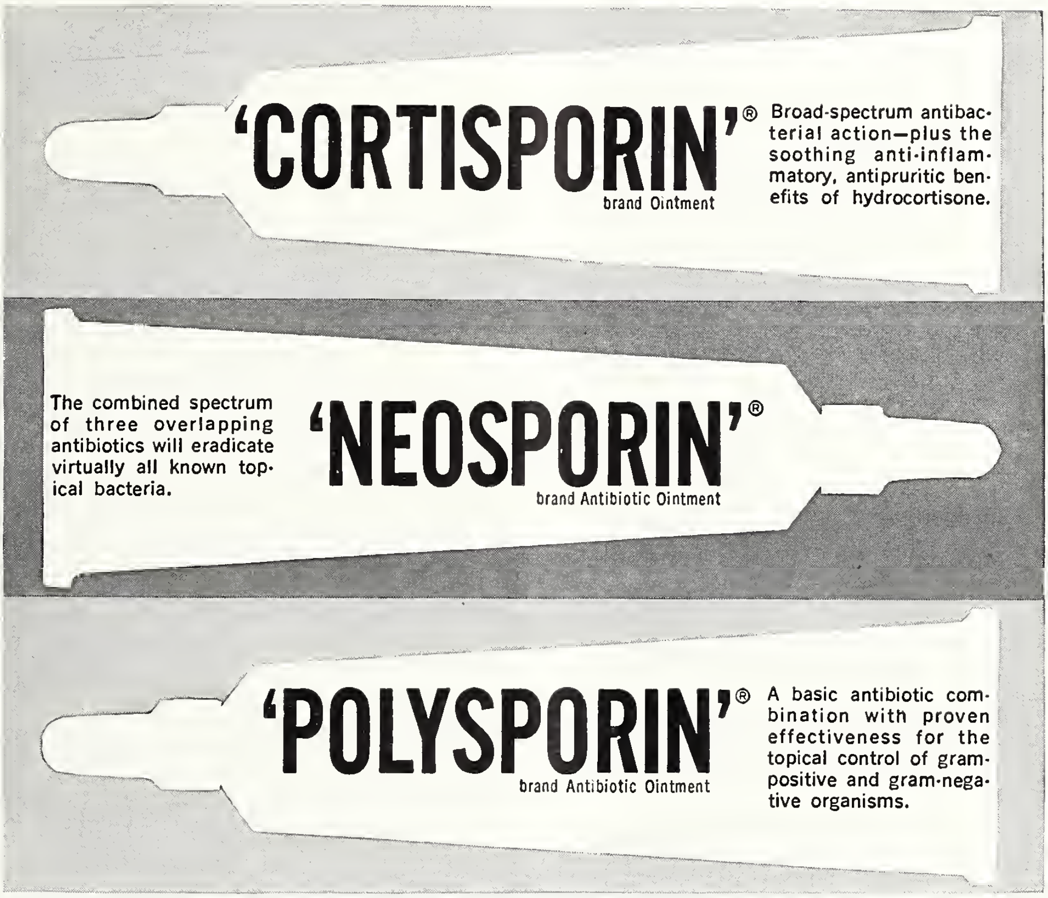
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at a meeting of the Missouri Association for Social Welfare in Kansas City, February 27.

Dr. M. D. Overholser, professor of anatomy and chairman of the department, attended the meeting of the fifth Councilor District of the Missouri State Medical Association at the Missouri Hotel in Jefferson City, February 23. Around 80 physicians heard speakers on bills before the State and National Legislatures that were of interest to physcians.

Dr. Benedict J. Campbell, assistant professor of biochemistry, and Dr. James T. Barrett attended a meeting of the St. Louis Biochemistry group in St. Louis, February 28, at the Steinberg Hall of the Jewish Hospital. "Some Observations on Carbohydrate Transport in *E. Coli*" was the topic of discussion. Dr. B. L. Horecker from New York University School of Medicine was the speaker.

Dr. J. M. Martt, associate professor of medicine and director of the heart station, attended a council on Medical Television of the Institute for the Advancement of Medical Communication in Bethesda, Maryland, April 6 and 7. He is also scheduled to participate in a scientific exhibit entitled: "New Technies of Cardiac Monitoring" at the annual meeting of the A.M.A. in New York City June 25 to June 30. Dr. Martt participated in a panel "Management of Difficult Cardiac Problems" at a meeting of the Missouri State Medical Association in Kansas City, Mo., March 21. He also attended the regional meeting of the American College of Physicians February 25 in Columbia.

Dr. Donald P. Durand, assistant professor of microbiology at the Medical Center, attended the fifteenth annual Urology Symposium held Feb. 23 through 25 at the University of Texas M. D. Anderson Hospital and Tumor Institute, Houston. The symposium topic was "Fundamentals of Cancer Research."

Dr. Michael H. Ivey, assistant professor of microbiology, participated in grand round discussion of a case of strongyloidiasis in the department of pediatrics at the medical center March 14.

Several members of the department of physiology and pharmacology attended the Biophysical Society meetings in St. Louis February 15 through 18. Those attending were: Dr. D. K. Meyer, professor, Dr. M. L. Zatzman, assistant professor, Dr. W. S. Platner, professor, Dr. J. E.

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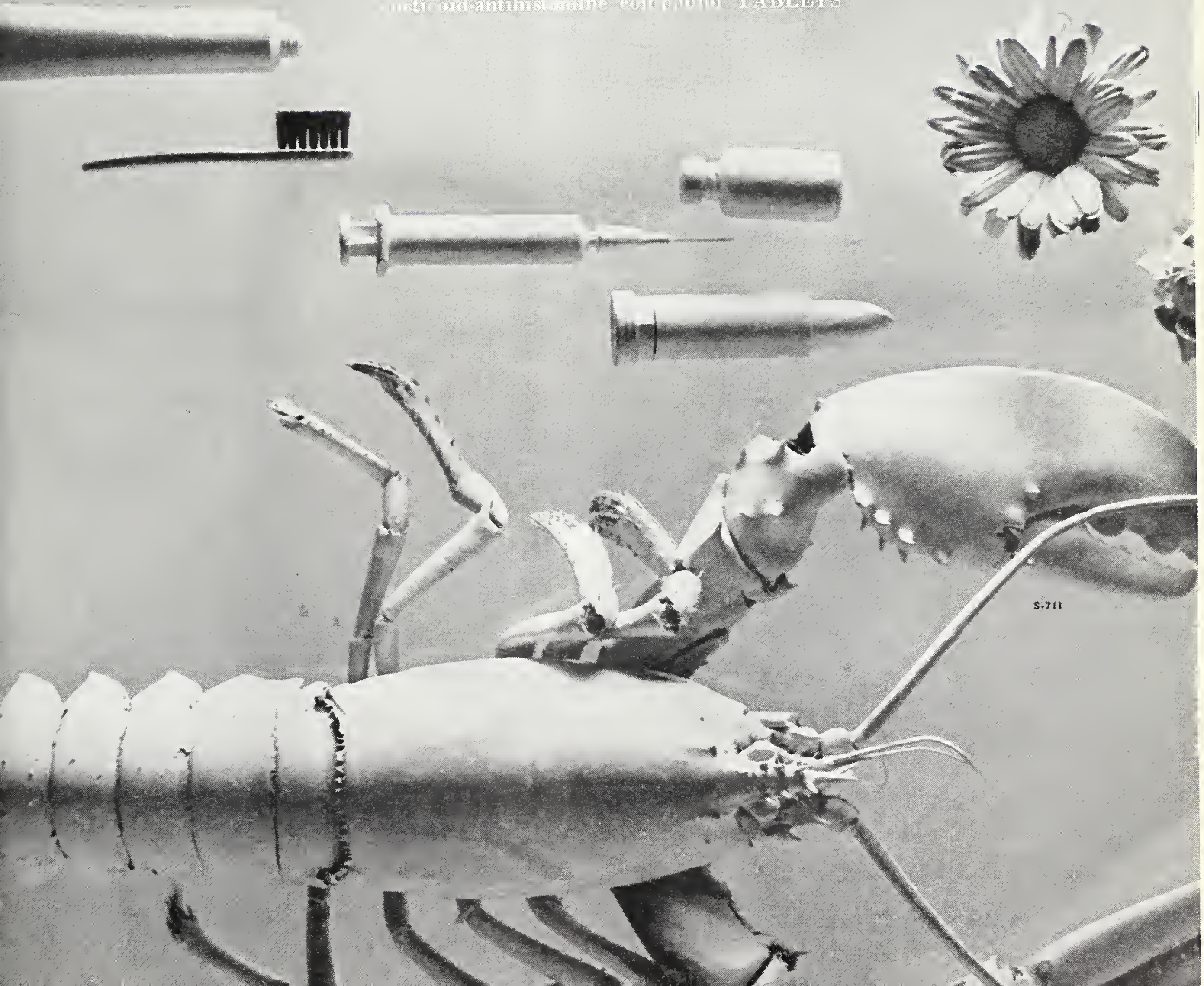
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Randall, associate professor, Mr. C. A. Robb, Mr. J. L. Shields, and Miss E. P. Profeta.

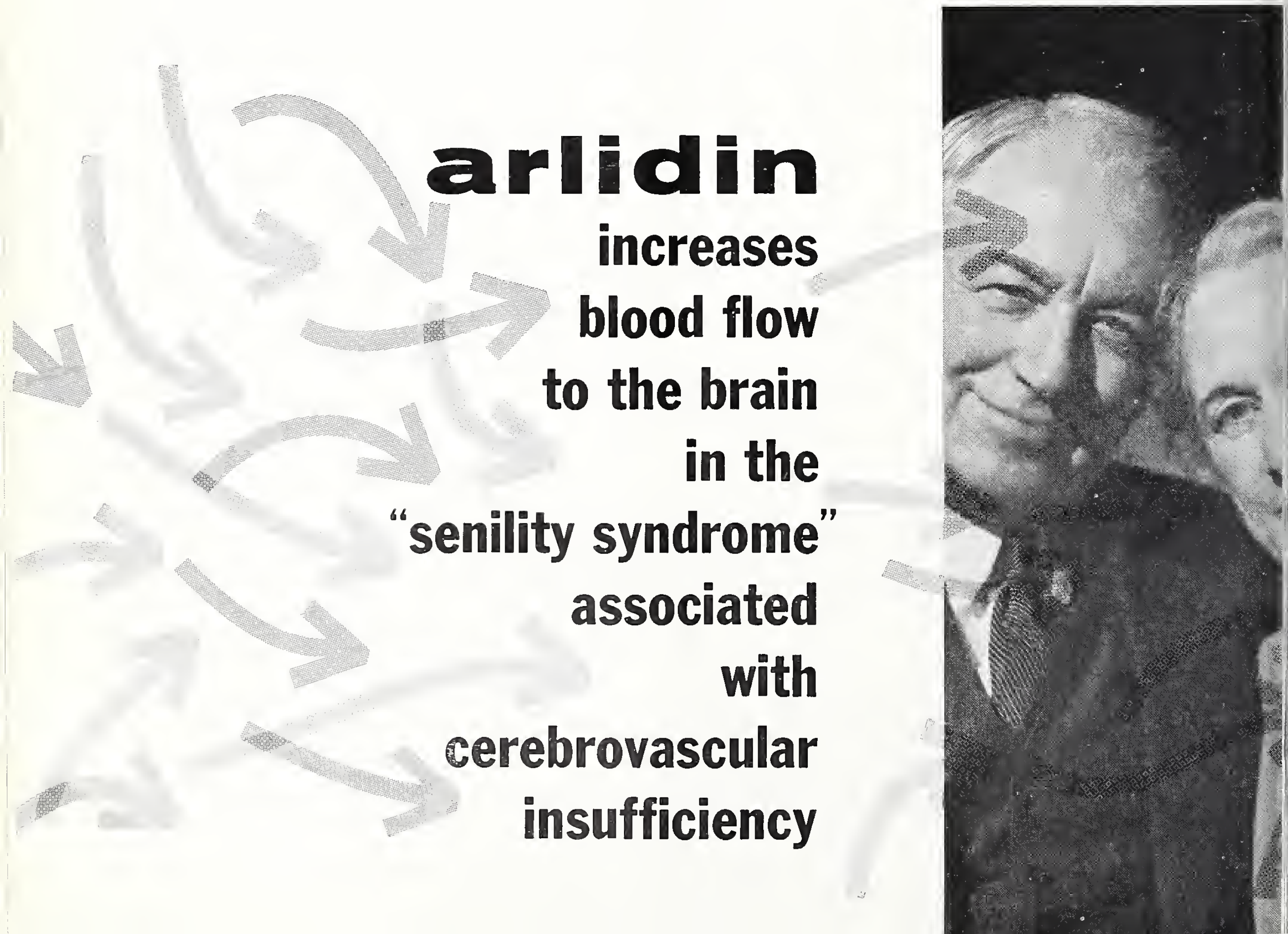
Dr. M. L. Zatzman also presented a lecture on general biology to the students of Rennick High School, March 1. Dr. Meyer spoke on war gases at the Civil Defense meeting in Columbia, February 13; Dr. Platner conferred with officials on a grant project in Bethesda, Maryland, National Institutes of Health, February 15 and 16. Dr. B. A. Westfall, professor and chairman of the department, delivered a lecture to the Medical History Group on "Ebers Papyrus" February 16.

Dr. James M. A. Weiss, associate professor and acting chairman of the department of psychiatry, attended a Social Science Institute at Washington University in St. Louis at the Ellenwood House March 3 and 4. The general topic of discussion for the Institute was "The Psychiatric Hospital as a Social System." Dr. Weiss was one of 65 psychiatrists, social scientists, psychologists and other professional workers in the behavioral science field invited from University and Research Centers throughout the country. Dr. Weiss also discussed "Mental Health for Teen Agers" at a meeting of the Combs Circle of the Methodist Church in Columbia, February 22.

Dr. David Davis, assistant professor of psychiatry, gave a 50 minute lecture on the problems of "Communication and Interpersonal Relationships in Industry" at a luncheon of the University of Missouri School of Nursing and Continuing Education Service in Cooperation with the Industrial Nurses of Missouri in the Student Union, Columbia, March 4.

Dr. John Modlin, professor and chairman of the department of surgery, and Dr. Carl H. Almond, assistant professor of surgery, attended a meeting of the Central Surgical Association in St. Louis, from February 16 through 18. Dr. Modlin, Dr. Almond and Dr. John Landor, assistant professor of surgery, also attended the St. Louis Surgical Society Meeting on Tuesday, March 7. Guest speaker was Dr. Oliver Cope from Boston who lectured on "Hyperparathyroidism."

Dr. Hugh E. Stephenson, Jr., professor of surgery, spoke at two sessions of the Eighth Annual Postgraduate Symposium on heart disease, sponsored by the Fort Worth Heart Association in



Fort Worth, February 19. His talks were: "New Advances in Cardiac Resuscitation Technics," and "The Obstruction Pattern in Coronary Artery Occlusion and Its Therapeutic Implication." Around 225 M.D.'s attended the symposium. Dr. Stephenson also attended the annual meeting of the Central Surgical Association, held at the Park Plaza Hotel in St. Louis from February 16 to 18.

Dr. Ian M. Thompson, associate professor of surgery, chief of the urology section, attended meetings of the Western Urological Forum and the American Urological Association on February 1-9 in Los Angeles and Las Vegas where he presented a paper on "Exstrophy of the Urinary Bladder and Urethra-Vesical Malignancies," and an exhibit on "'The Effects of Denervation Upon Renal Function," in collaboration with Dr. Carl Almond and Dr. Marvin Zatzman. The exhibit was awarded first prize for original research.

Dr. Kenneth Keown, professor of surgery (anesthesiology), attended a meeting of the Central Surgical Association in St. Louis as a guest, February 16 through 18.

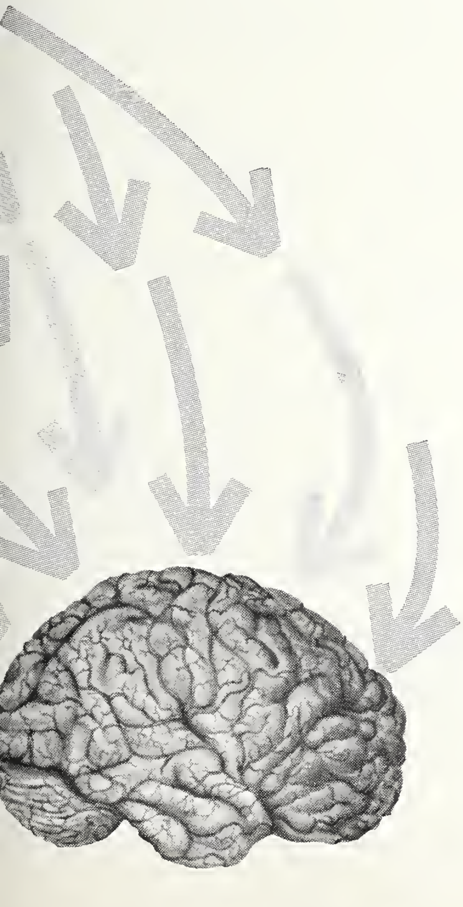
ST. LOUIS UNIVERSITY

Lectures

Dr. John P. Wyatt, professor of pathology and associate director of the department at the St. Louis University School of Medicine, was invited to England to deliver three scientific papers on chronic bronchitis, emphysema and pneumoconiosis. Dr. Wyatt spent three weeks in England and returned to St. Louis April 1.

He delivered a paper before the British Thoracic Society in London on "Function and Morbid Anatomy." From there he went to Cardiff, Wales, where he delivered a paper on "pneumoconiosis" before the United Cardiff Hospitals of the Welch National University School of Medicine. While there Dr. Wyatt visited Dr. Jepro Gough, professor of pathology and bacteriology, and Dr. John Gilson, director of pneumoconiosis research.

Dr. Wyatt delivered a third research paper on "Pneumoconiosis" before the Postgraduate Medical School of London. Dr. Wyatt, an investigator of pulmonary diseases at St. Louis Univer-



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references: 1. Madow, L.: Penn. M. J. 62:861, June 1959. 2. Stieglitz, E. J.: Geriatric Medicine, ed. 2, Philadelphia, Saunders, 1949 p. 274. 3. Winsor, T., et al.: Amer. J. Med. Sciences 239:594, May 1960. 4. Eisenberg, S.: ibid, July 1960.

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sity, correlates his research studies with the Miller Pulmonary Laboratories located at Firmin Desloge Hospital.

Four members of the department of anatomy attended the Seventy-Fourth Session of the American Association of Anatomists at the University of Illinois College of Medicine March 21-24. They were: Dr. Kermit Christensen, acting director of the department; Dr. Calvin A. Richins, associate professor of anatomy; Dr. Paul A. Young, assistant professor of anatomy, and Miss Anna Marie Conway, instructor in anatomy.

Dr. Don C. Weir, professor of clinical radiology, was a guest speaker at the University of Minnesota Medical School Center of Continuation Study on March 18. He delivered a paper on "X-ray Diagnosis of Injuries of the Cervical Spine."

Dr. James L. Donahoe, senior instructor in pediatrics, spoke on heart diseases before the meeting of the American Chemical Society March 28.

Dr. C. Rollins Hanlon, director of the department of surgery, attended the American Surgical Association meeting in Boca Raton, Fla., March 20.

Grant Award

A March of Dimes grant of $14,855 from The National Foundation to St. Louis University for studies probing further into the basic problem of how viruses multiply in host cells is to be directed by Dr. Norman E. Melechen, assistant professor of microbiology.

Dr. Melechen and his associates have been studying a type of virus (called bacteriophage) that attacks bacteria rather than people. Their work has two major phases. They are investigating a latent virus which under certain circumstances can be changed to cause a virulent infection. And they are gaining new understanding of the chemistry of virus attack and reproduction.

The latent or hidden type of bacterial virus which Dr. Melechen's group is studying can infect host cells (bacteria) without killing them. Particles of these viruses can be transmitted from one generation of bacteria to the next indefinitely without harming them, in what amounts to peaceful coexistence of virus and host.

At times, however, these harmless virus particles are converted into active multiplying viruses. This results in death of the bacteria and liberation of virus. It is possibly in the laboratory

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Dosage: For children: under 6 years, 50 mg. daily; over 6 years, 50-100 mg. daily; in divided doses. For adults: 25 mg. t.i.d. to 100 mg. q.i.d. *Supplied:* Tablets 10 mg. and 25 mg., in bottles of 100 and 500. Tablets 100 mg., in bottles of 100. Syrup, 2 mg. per cc., in pint bottles. Also available: Parenteral Solution. Prescription only.

References: 1. Freedman, A. M.: Pediat. Clin. North America *5*:573 (Aug.) 1958. 2. Nathan, L. A., and Andelman, M. B.: Illinois M. J. *112*:171 (Oct.) 1957. 3. Santos, I. M. H., and Unger, L.: Ann. Allergy *18*:179 (Feb.) 1960. 4. Litchfield, H. R.: New York J. Med. *60*:518 (Feb. 15) 1960.

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to bring this change about by treating bacterial cells which carry the hidden virus with x-ray, chemical and other means.

Dr. Melechen has recently found that with a certain strain of bacteria, such a conversion from latent to active infection can be brought about by depriving the bacteria of a chemical called thymine. Thymine-starved bacteria are unable to multiply and this condition apparently upsets the peaceful coexistence relationship between host and virus, with the result that the harmless parasitic viruses become virulent and kill the host cells.

To what extent may humans be subject to infection by hidden viruses which can at some time become active and cause disease? Scientists do not know, but the possibilities give basic virus studies such as those by Dr. Melechen considerable importance.

In addition to studying the latent virus phenomenon further the University virologists will continue studies, under the March of Dimes grant, of the role of protein in virus infection.

Sister Ann Fidelis of the Maryknoll Sisters, a junior at the School of Medicine, has been awarded a grant to spend 12 weeks at the Maryknoll Sisters Clinic in Pusan, Korea. She is one of four women medical students in the United States to receive a foreign fellowship this year from the Association of American Medical Colleges. The fellowships are made possible by Smith Kline & French Laboratories.

DEATHS

Zoglin, Nathan, M.D., 5901 Wyandotte St., Kansas City, a graduate of National University of St. Louis, 1917; member of Jackson County Medical Society; aged 70; died February 27.

McMurtry, Leonard K., M.D., 506 S. Williams St., Moberly, a graduate of Indiana University, 1931; member of Chariton-Macon-Monroe-Randolph County Medical Society; aged 65; died February 28.

York, William B., M.D., Sarcoxie, a graduate of National University, 1917; member of Jasper County Medical Society; aged 71; died March 6.

Powell, Rudolph V., M.D., 818 S. Hanley Rd., Clayton, a graduate of St. Louis University, 1919; member of St. Louis Medical Society; aged 67; died March 8.

Douglas, John W., M.D., 32nd & Oakridge Sts., Joplin, a graduate of Lincoln Medical College, 1908; member of Jasper County Medical Society; aged 76; died March 11.

Klein, Harry A., M.D., 2 Sunswept Drive, Creve Coeur, a graduate of St. Louis University, 1929; member of St. Louis Medical Society; aged 57; died March 12.

Comboy, Lawrence J., M.D., 925 Red Road, Independence, a graduate of University of Kansas, 1931; member of Jackson County Medical Society; aged 56; died March 20.

REGISTRATION BOARD MEMBERS NAMED

New members to the Board of Registration for the Healing Arts were named in late March by Gov. John M. Dalton. The members named are William D. Perry, M.D., Brentwood, chairman; H. G. Parker, M.D., Platte City; Raymond A. Ritter, M.D., Cape Girardeau; Harry S. Still, D.O., Macon; L. Richard Webb, M.D., Springfield. D. Elliott O'Reilly, M.D., St. Louis, and R. A. Michael, D.O., Jefferson City, had been on the previous board and will continue to serve.

Dr. O'Reilly and Dr. Perry will serve until Sept. 3, 1961; Dr. Still and Dr. Webb until Sept. 3, 1962; and Drs. Ritter, Parker and Michael until Sept. 3, 1963.

BOOKS RECEIVED

Women and Fatigue, A Woman Doctor's Answer, by Dr. Marion Hilliard. Doubleday & Company, Inc., Garden City, New York, 1960. Price $2.95.

The Concise Encyclopedia of Modern Surgery, by James Hale Rutledge, M.D. Chilton Company, Book Division, Philadelphia and New York, 1960. Price $8.00.

CIBA Foundation Symposium on Cellular Aspects of Immunity, edited by G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. Little, Brown and Company, Boston, 1960. Price: $10.50.

CIBA Foundation Colloquia on Endocrinology, Volume 13, Human Pituitary Hormones; In Honor of Professor B. A. Houssay, For. Mem. R.S. by Editors of the CIBA Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P. and Cecilia M. O'Connor, B.S. Little, Brown and Company, Boston, 1960. Price: $9.50.

You see an improvement within a few days
Thanks to your prompt treatment and the smooth action of Deprol, her depression is relieved and her anxiety and tension calmed — *often in a few days.* She eats well, sleeps well and soon returns to her normal activities.

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Acts swiftly — the patient often feels better, sleeps better, within a few days. Unlike the delayed action of most other antidepressant drugs, which may take two to six weeks to bring results, Deprol relieves the patient quickly — often within a few days. Thus, the expense to the patient of long-term drug therapy can be avoided.

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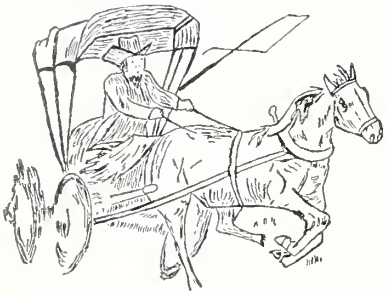
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

The members of the Pettis County Medical Society have established a clinic at Sedalia for the free treatment of persons who cannot pay for medical service. The clinic will be operated in the hospital and members of the Pettis County Medical Society as well as dentists will serve at stated intervals.

Governor Hyde has appointed Dr. Rudolph Vitt of St. Louis and Dr. Franklin E. Murphy of Kansas City as members of the State Board of Health.

Dr. C. H. Shutt, Hospital Commissioner of St. Louis, has resigned that office effective at the pleasure of the director of public welfare. Dr. Shutt was appointed Hospital Commissioner in 1911 and has completed ten years of continuous service in the position. Dr. Shutt leaves the hospital system of St. Louis in such good condition that his work will ever remain a credit to his management of the eleemosynary institutions of St. Louis.

The Jackson County Medical Society has moved its headquarters from the Rialto Building, Kansas City, to the General Hospital. The medical library, which is now owned by the Jackson County Medical Society, has also been moved to the General Hospital.

TWENTY-FIVE YEARS AGO

The Columbia session of the Missouri State Medical Association which convened April 13, 14 and 15 at Hotel Tiger was an excellent meeting despite the anticipation of the session of the American Medical Association to follow so soon. The attendance was within fifty of that at the Excelsior Springs session in 1935 which broke former records. The following officers were elected: President-elect, Dr. Dudley S. Conley, Columbia; Vice Presidents, Drs. A. H. Marshall, Charleston, James E. Stowers, Kansas City, and E. Y. Pare, Leeton; Secretary-Editor, Dr. E. J. Goodwin, St. Louis. Dr. Ross A. Woolsey, St. Louis, was installed as President. The Association accepted the invitation of the Cape Girardeau County Medical Society to meet in Cape Girardeau in 1937.

Deaths from diphtheria decreased 37 per cent in St. Louis in 1935 and the number of cases 31 per cent. In spite of the large decrease in 1935 there were 665 persons who contracted diphtheria, 24 of whom died.

A consulting staff for the Missouri State Tuberculosis Sanatorium, Mount Vernon, was organized at a meeting at the Sanatorium, April 4. Dr. Wallis Smith, Springfield, was elected president of the staff, and Dr. R. H. Runde, Mount Vernon, secretary.

The St. Joseph Clinical Society held its annual spring clinics March 23, 24 and 25 with headquarters at the Robidoux Hotel.

Dr. Thomas Parran, Jr., State Health Commissioner of New York, and at one time representative of the U.S.P.H.S. in Missouri, has been nominated by President Roosevelt as Surgeon General of the U.S.P.H.S. to succeed Dr. Hugh S. Cumming, resigned.

TEN YEARS AGO

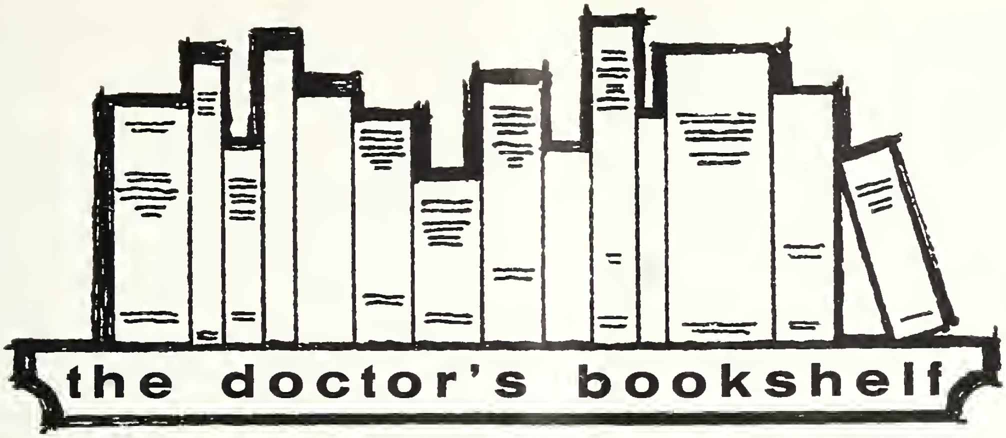
Dr. Ira H. Lockwood, Kansas City, has been elected commissioner for the ninth district of the Blue Shield Commission.

Dr. J. A. Dickson and Dr. Willis Hall, St. Louis, held an informal reunion in celebration of the seventieth anniversary of their graduation from Washington University School of Medicine on March 5.

A plaque in memory of the late Wallis Smith, M.D., Springfield, will be placed in Stone Chapel at Drury College, according to Dr. J. F. Findlay, president of the college.

Edward D. James, M.D., Joplin, was presented with gifts by the Jasper County Medical Society at a meeting on March 13 in honor of his eightieth birthday.

W. A. Bloom, M.D., and W. J. Shaw, M.D., Fayette, celebrated the twenty-fifth anniversary of their reopening of the Lee Hospital at Fayette on April 1.



BOOK REVIEWS

Surgical Pathology, by Lauren V. Ackerman, M.D., Professor of Surgical Pathology and Pathology, Washington University School of Medicine, St. Louis, Mo.; Surgical Pathologist, Barnes Hospital and Affiliated Hospitals, St. Louis, Mo.; Consultant to the Armed Forces Institute of Pathology. In collaboration with Harvey R. Butcher, Jr., M.D., Associate Professor of Surgery, Washington University School of Medicine, St. Louis, Mo. Second Edition. The C. V. Mosby Company, St. Louis. 1959. Price $15.00.

This is the second edition of this well-known text of surgical pathology. Considerable revision has been made, including the addition of chapters on wound healing, vessels and the eye and ocular adnexa, written by collaborators.

In addition, collaborative chapters on non-neoplastic conditions of the skin and on the central nervous system have been rewritten. All of these are excellent summaries of these highly specialized fields.

The main text emphasizes those aspects of surgical pathology which the practicing pathologist uses in his day by day work. Consequently, tumors receive considerably more attention than the non-neoplastic lesions. The book is a ready reference for both the surgeon and pathologist faced with a decision in clinical management of a particular case. It is in this area that it will have maximum usefulness. The descriptions of the gross and microscopic appearances are brief and considerable reliance is placed in photographs and photomicrographs to delineate the main features. The high quality of the illustrations fully justifies this approach. A concise section on clinical-pathologic correlation rounds out the discussion of each tumor or group of tumors and provides the basis for a therapeutic decision. In these sections the authors, of course, enter a major zone of controversy and probably no one would agree with all their statements. In general, their approach is reasonable and based on extensive personal experience. This book is strongly recommended as a useful text for both the practicing surgeon and the practicing pathologist. R. E. J.

How to Live With Diabetes, by Henry Dolger, M.D., Chief, Diabetes Clinic, Mt. Sinai Hospital, New York and Bernard Seeman. Complimentary copy presented by The Upjohn Company, Kalamazoo, Michigan. W. W. Norton & Company, Inc., New York. Price $3.50.

This book is written for the person with diabetes and his friends and associates concerned with the disease. It approaches the problem of diabetes from enough technical standpoint to acquaint the reader with the basic concepts of diabetes such as its historic background, incidence, recognition, treatment and complications. Of perhaps more importance is the fact that the text emphasizes the social aspects of diabetes as related to the disease in childhood, adolescence, adult life and pregnancy. T. S. H.

The Concise Encyclopedia of Modern Surgery, by James Hale Rutledge, B.S., M.D., F.A.C.S. Chilton Company—Book Division, Philadelphia and New York, 1960. Price $8.00.

The book covers a wide scope of subject matter—definition of the medical specialties, the nature of a patient's stay in hospital, the usual procedures of investigation and treatment carried out in hospital.

Next is a chapter on general pathology and a chapter on the general principles of surgical care and the complications of surgery.

The remainder of the volume consists of a description of the diseases and surgical treatments available of the various organs and systems of the body.

The subject matter has been well handled, and the volume constitutes a valuable and easily readable coverage of the field of surgery as a whole. J. E. L.

Diabetes as a Way of Life, by T. S. Danowski, M.D., Renziehausen Professor of Research Medicine, University of Pittsburgh School of Medicine; Senior Staff Physician at Presbyterian-Woman's, Children's, Elizabeth Steel Magee, and Shadyside Hospitals of Pittsburgh; Consultant in Metabolism, Oakland Veteran's Administration Hospital, Pittsburgh. Coward-McCann, Inc., New York. Price $3.50.

This well written book is designed for the diabetic person. It certainly would also be a useful guide to the parents of diabetic children. Written in a concise and easily understood text, it approaches the problem of diabetes from the diabetic's standpoint discussing the historic background, the disease itself, its incidence, recognition, treatment and complications. Of particular importance, it is of interest to note the explanation of the differences between acidosis-coma and insulin shock, and the social aspects and implications of diabetes. T. S. H.

Emergency War Surgery, by United States Government Printing Office, Washington, D. C. 1958, U. S. Armed Forces Issue of NATO Handbook prepared for use by the Medical Services of NATO Nations. Price $2.25.

This manual has been prepared by a committee of surgical consultants representing the military medical services of France, United Kingdom and the United States, with assistance from representatives of other NATO nations.

Its purpose is to familiarize the reader with the special problems of traumatic surgery as related to military operations, and to standardize the procedures for caring for the wounded in the forward areas so that the best possible medical care can be provided for each member of the Allied fighting forces.

In the first chapters are covered the types of wounds and injuries apt to be encountered, including those of thermo nuclear warfare. For each type of injury, there is a discussion of the cause, pathological process, checking and sorting, management and a discussion of mass casualties.

In subsequent chapters the response of the body to wounding, the general consideration of wound management and the specific problems of wounds of the various regions of the body are considered. J. E. L.

CLASSIFIED ADS

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WANTED—Administrative Medical Officer for Government Agency. Position located in St. Louis but involves some travel. Starting salary $12,730. Health and Life Insurance, Retirement Plan and other fringe benefits included. Write Box 250, c/o Missouri State Medical Association, 623 Missouri Theatre Building, St. Louis 3, Missouri.

Curiosa et Trivia

WILLIAM B. McCUNNIFF

They might trim ankles . . . but four-inch heels on women's shoes nearly triple the weight thrown on the balls of the feet.

Dr. O. J. Becker of Chicago reports that rhinoplasty patients, having copied such noses as Hedy Lamarr's, Grace Kelly's or Elizabeth Taylor's, are currently paying the ultimate female-to-female compliment to The First Lady; the request is for a nose like Jacqueline Kennedy's.

Almost two thirds of persons recently surveyed in Cleveland felt that hospital costs are too high; about half of those surveyed four years ago had the same feeling. But about three fourths believe that hospitals are better now than ten years ago.

Four years of medical school education (excluding living expenses) now cost about $4,000.00; this far exceeds the four year cost of an education leading to a Ph.D. Currently this is under $2,000.00.

Capsule Clinics

- Maternal exercise may decrease uterine blood flow and thus put a temporary additional load on the uteroplacental oxygen transfer mechanism. In some cases this may be reflected by an abnormal fetal heart rate pattern. Hon, E. H., and Wohlhemuth, R., Am. Obst. & Gynec. **81**:361, 1961.
- No clinically important difference in natriuretic or kaluretic potency was observed between hydrochlorothiazide and hydroflumethiazide. Edelstein, S. G., et al., New England J. M. **264**:207, 1961.
- The human sperm cell weighs about one 35 trillionth of a gram, which bears the same ratio to a gram as a penny relates to our national debt in pennies. Hartman, C. G., Fertility & Sterility **12**:1, 1961.
- Single oral doses of 1.5 to 2 mg./Kg. ferrous sulfate as elemental iron are more efficiently absorbed when administered under fasting conditions than larger doses. Woodruff, C. W., Pediatrics **27**:194, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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TOM R. O'BRIEN

IN THE LEGISLATURE

H. B. 633-690. Kerr-Mills Implementation

H. B. 633 was considered by the House Committee on Public Health on May 2. H. B. 690, referred to the House Committee on Social Security, was reassigned to the Committee on Public Health. That committee appointed a subcommittee to consider both bills. It is hoped that a substitute, to be known as House Committee Substitute for H. B. 633 and 690, will have been approved by the Committee prior to publication date.

H. B. 133. Chiropractic

This act provides for additions to the chiropractic curriculum including bacteriology, biochemistry, diagnosis and x-ray, the emphasis being placed on diagnosis. In addition, the length of the course is extended from three to four years. The definition is changed to include x-ray for diagnostic purposes. The bill passed the House by a margin of three votes, receiving 82, whereas the number needed is 79.

This act is now pending in the Senate Committee on Public Health.

H. B. 157. Competency of a Minor

This act provides that any married minor and any minor parent shall be considered to be an adult for the purpose of consenting to medical and surgical care for himself, his spouse or his child. The act has passed the House and is now pending in the Senate Committee on Public Health.

H. B. 35. Withholding of State Income Taxes by Employers

This act, adopted by both houses with an emergency clause, will take effect July 1, 1961. The act provides that all employers, including physicians, shall withhold state income taxes from the wages of their employees, and transmit such withheld wages to the state every three months.

In addition, the self-employed, including physicians, are required to file estimates of anticipated income and to make quarterly payments as they are now required to do under federal law.

Additional information as to duties under the terms of this act will be sent to members when it is received.

Senate Committee Substitute for S. B. 77. Chiropody

This act, as originally drafted, provided that chiropodists would be permitted to use all drugs and medicines for the treatment of ailments of the human foot. The Senate Committee substitute, however, limits the use of drugs and provides that none may be used for the treatment of systemic diseases.

The act is now pending on the final passage calendar of the House.

S. B. 359. Optometry

A substitute bill was presented to the Committee on Public Health of the Senate on May 2. The substitute did not include any definition changes from the present statute. The Committee took no action.

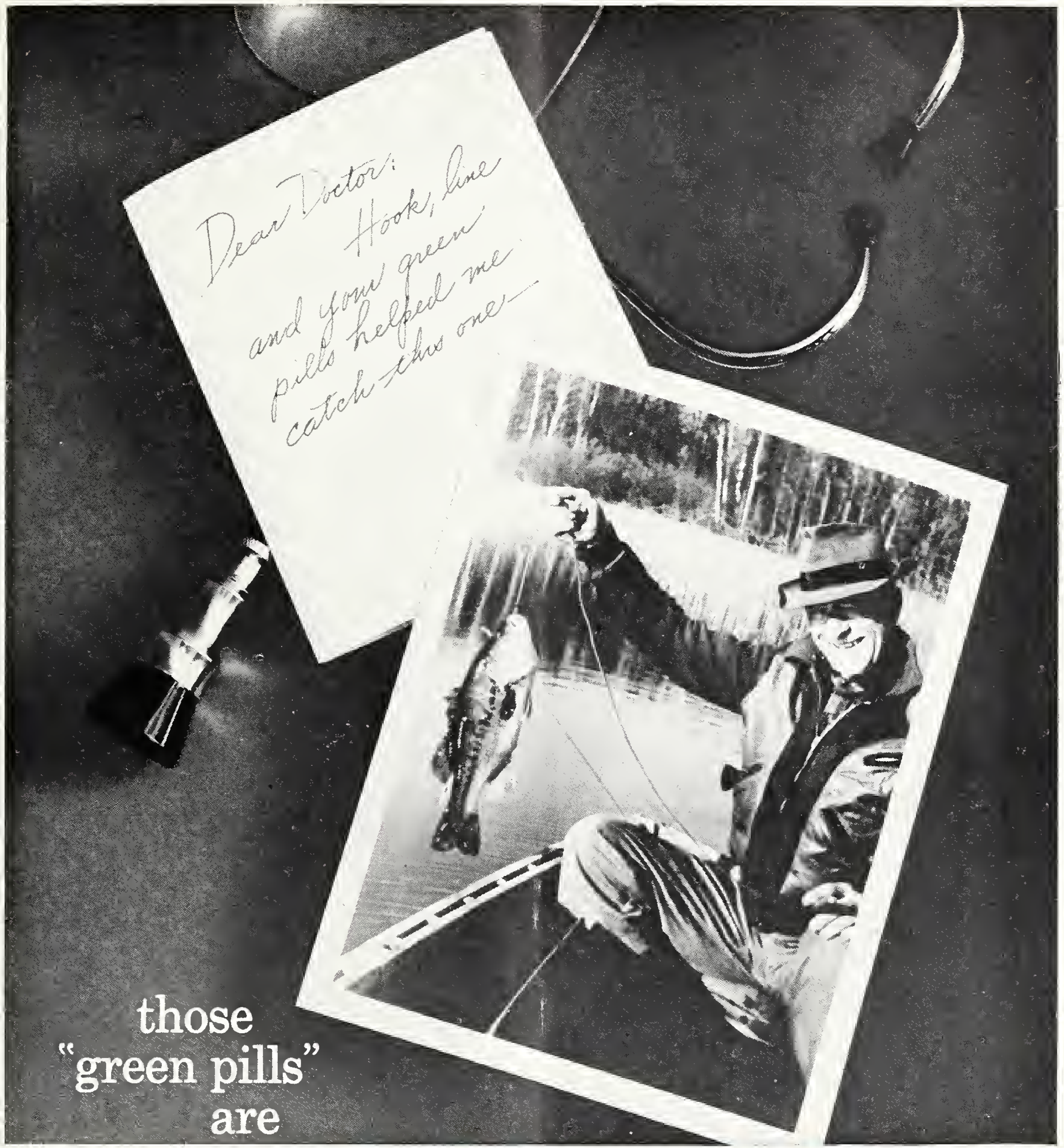
S. B. 146. Licensing the Practice of Physical Therapy

This act provides for the creation of a board of five persons to examine and license physical therapists. The board would be composed of three qualified physical therapists and two licensed physicians who are members of the joint licensure board.

Amendments were offered by the Association to change the board to a committee of the present licensure board which licenses doctors of medicine and osteopathy, and to require that physical therapy be done only on prescription or under supervision of a physician. These amendments follow recommendations of the MSMA Committee on Physical Medicine and Rehabilitation. Several of the amendments were adopted, however, the bill is not entirely satisfactory. Further efforts to amend are being made. The bill is pending in the Senate.

S. B. 82. Public Hospital District

The act provides for the creation of a public hospital district in Jackson County. Public hospitals, public clinics and other public health facilities would come under the supervision of a board of trustees composed of eight persons elected by the qualified voters of Jackson County, including Kansas City. Thus the Kansas City General Hospital and the Jackson County Hospital would come under the jurisdiction of the board. The bill is pending in the Senate Committee on Public Health and Welfare.



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WASHINGTON

Blue Shield Supports AMA

The National Association of Blue Shield Plans went on record as supporting the American Medical Association in its endorsement of the Kerr-Mills Medical Aid for the Aged Law passed by Congress in 1960. The action was taken by representatives of the nationwide Blue Shield Plans at their 1961 annual business meeting held April 16-18 in Chicago.

The resolution was submitted by the Colorado Blue Shield Plan and called on Blue Shield Plans to make their administrative facilities available—through sponsoring medical societies—to state legislators in order to assist in the implementation of the new law at state levels.

Mental Health

The seriousness of the national problem of mental illness was emphasized on three fronts recently in Washington.

The Joint Commission on Mental Illness and Health reported on a comprehensive five-year study of the overall problem. Second, another special government advisory committee recommended smaller community-sized mental institutions after a two-year study of facilities for care of the mentally ill. Third, a Senate subcommittee held hearings on the constitutional rights of mental patients.

The Joint Commission recommended sweeping reforms in the treatment of mental illness as well as expanded and improved facilities. It said that some gains had been made in the last 10 years but that the need for adequate facilities for humane, healing treatment of the mentally ill is still largely unmet.

Medicare Changes Director

Effective May 1, Col. W. D. Graham became executive director of the Office for Dependents' Medical Care (Medicare). He succeeds Brig. Gen. Floyd L. Wergeland, who takes command of the Walter Reed General Hospital.

New Health Bills Introduced

Among recent bills introduced in Congress is one by Durward G. Hall, M.D., (R., Mo.), which would liberalize the definition of "dependent" for purposes of medical expense deduction in computing income taxes. The bill is HR 6304.

Another bill would require prescription drug advertising to list the product's ingredients, describe possible side effects and list contraindications for its use.

Physician's Retirement

A new bill to encourage physicians and other self-employed persons to set up their own retirement plans started through Congress with approval of the House Ways and Means Committee.

Bearing the same number, H. R. 10, as a similar bill which died in Congress last year, the new measure would permit a self-employed person to defer taxes on income placed in a private retirement program. The special treatment would be limited to $2,500 or 10 per cent of income each year, whichever is smaller.

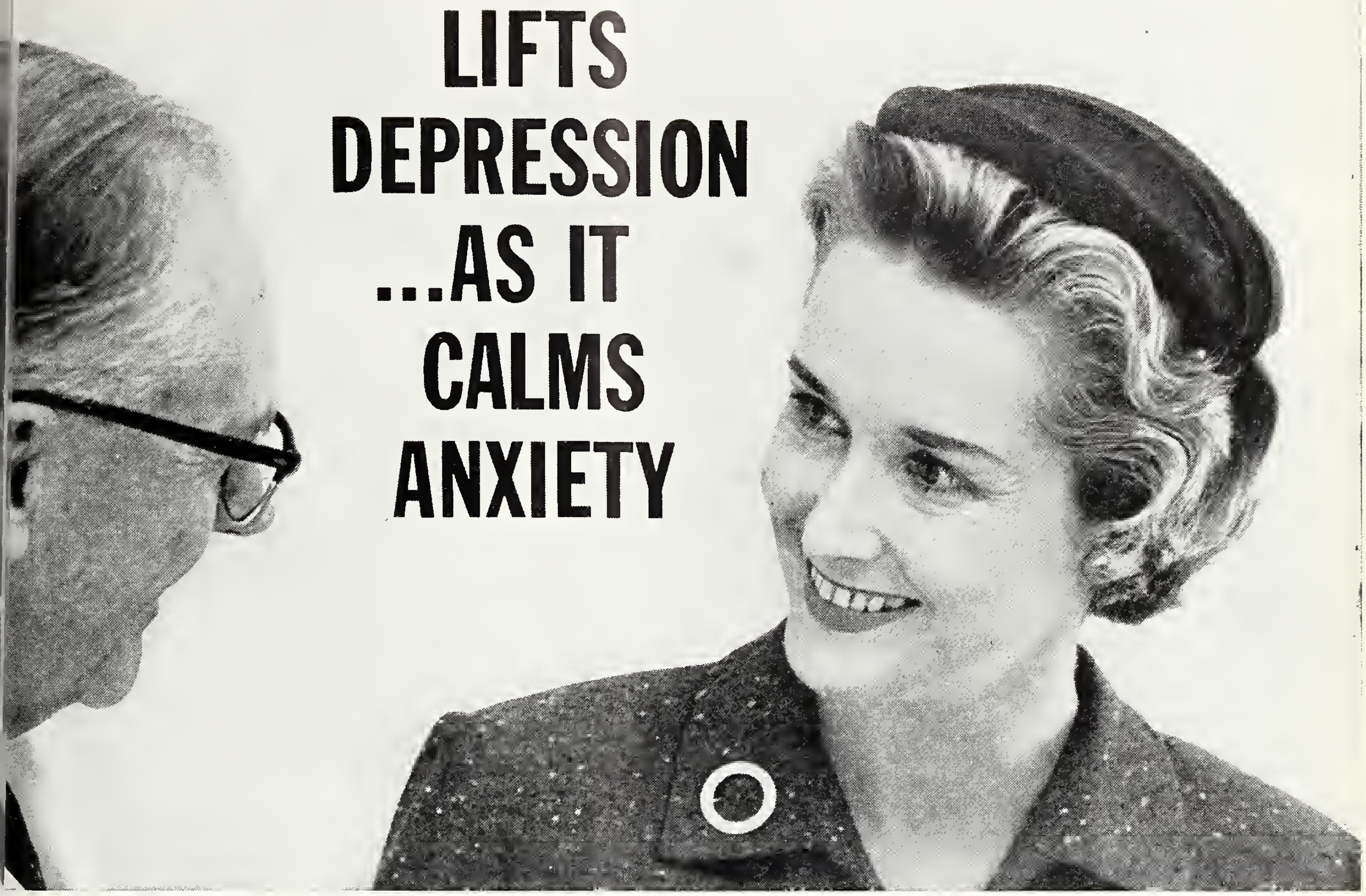
Such income could be invested in qualified pension trusts, annuity programs, profit-sharing plans or a new type of non-transferable government bond redeemable when the individual reaches retirement age or suffers disability.

An individual could start drawing benefits at age 59½, or earlier in the ease of disability. A self-employed person would have to start drawing benefits by age 70½.

If a self-employed individual had more than three employes, he would be required to set up pension plans for them before he could benefit himself.

Duel to Decide Socialized Medicine?

"Will Duel Decide Outcome of Socialized Medicine?" captions a report on the situation on TV debates and criticism of AMA advertising by HEW in the Washington Report on the Medical Sciences. Of the TV debates, the Report says "After recent Annis-Reuther-Humphrey network encounters, it is doubtful whether more of same would attract many viewers even if some new material were available." The Report also says that President Kennedy has conceded that chances for passage of social security eldercare in 1961 are dim. There are many health bills before the Congress but neither the House Commerce Committee nor the Senate Labor & Welfare Committee was moving ahead on any of the health bills.



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Across
Missouri

Activities in Hospital Construction

Among hospital construction or enlargements which have been in the news in recent weeks are the planned opening of an addition to Levering Hospital, Hannibal; the razing of the Dr. West Hospital at Monett to make way for a new addition this summer to St. Vincent's Hospital; a bond proposal is under consideration in Macon for an addition to the Samaritan Hospital; Carroll County Memorial Hospital at Carrollton held open house on April 16; opening of a new addition to St. Joseph's Hospital in St. Charles was held in March; construction on a Johnson County Memorial Hospital at Warrensburg of 62 beds is expected to start early in the summer; a new wing of the Springfield Baptist Hospital was dedicated in April; ground breaking for the new Missouri Baptist Hospital, St. Louis, was scheduled for May; bids have been asked for an 84 bed addition to the North Kansas City Memorial Hospital; plans are underway for a new wing for the Kelling Clinic and Hospital at Waverly; mayors of five North St. Louis County communities are proposing a North St. Louis County Hospital; the Bates County Hospital, opened last September, has installed additional x-ray equipment.

Division of Health Reports

A Biennial Report for 1958-1960 has recently been released by the Division of Health of Missouri.

In presenting an idea of the diverse work of the Division of Health, a listing of service programs shows nutrition service, home care service, general engineering, midwife supervision, well child conference, immunization projects, mental health clinics, chronic illness project, maternity clinic service, mental health information, health films and literature, diabetes detection projects, venereal disease case finding, recording of vital statistics, dental surveys and inspections, certification of milk producers, special mental retardation project, licensing of narcotic drug dealers, licensing of beverage manufacturers, sanitary and safety evaluation of swimming pools, regulation of food handling on inter-state carriers, school health service, public health nursing, licensing of hospitals, food and drug labeling, public health education, maternity nursing service, rabies vaccination clinics, licensing of nursing homes, infant and preschool service, hospital construction approval, laboratory diagnosis of rabies, food handler training projects, public health laboratory service, premature and infant care program, nursing home construction approval, licensing of lodging establishments, special health information meetings, approval of sanitary water supplies, tuberculosis skin testing project, collection of data on chronic radiation exposure, identification and evaluation of toxic materials exposure.

Economic Growth in Missouri

A report published by the Bureau of Business and Economic Research of St. Louis University on "Economic Growth in Missouri" points out that the population decrease in 70 per cent of Missouri counties is a deterrent to economic growth in the state. It points out that if Missouri is to increase its rate of income growth, which is lower in Missouri than in the nation, potential employees are a necessity for increased industry.

In a breakdown of population decrease in the state it shows that 84 of Missouri's counties lost population between 1950 and 1960. Sixty-two of these were rural counties with fewer than 2,500 employees in 1956. Some of the counties now have fewer residents than they had in 1890.

Health Benefit Growth

In 1960, insurance companies paid out more than $3.1 billion in health insurance benefits to the American public, compared to $2.9 billion in 1959, according to the Health Insurance Institute in an estimate of 1960 benefits by state.

The figures given for Missouri are $79,308,000 in 1960 as compared with $73,716,000 in 1959. The Midwest, comprising 12 states, climbed from approximately $962 million to $1,034 million in benefits to show an increase of 7.5 per cent.

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References: **1.** Smigel, J. O., *et al.:* J. Am. Geriatrics Soc. *7*:61 (Jan.) 1959. **2.** Shalowitz, M.: Geriatrics *11*:312 (July) 1956.

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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

The 1961 Annual Scientific Assembly of the American Academy of General Practice in Miami Beach, Florida, April 17-20, registered 2,725 physicians with a total registration of 6,205. The scientific sessions were held in the Miami Beach Auditorium. Over 200 companies presented technical exhibits with approximately 135 scientific, adding to a most interesting and informative display.

The session drawing the largest attendance was the panel discussion on Monday afternoon, April 17, entitled "Economics of Medicine Today and Tomorrow." The discussants included E. Vincent Askey, M.D., President of the AMA; Mr. Leonard Woodcock, Vice President, United Automobile Workers; Mr. Roger Fleming, Secretary-Treasurer of the American Farm Bureau Federation; Mr. R. C. Cooper, Executive Vice President, Personnel Services, United Steel Corporation; and Mr. Howard Hassard, San Francisco, Legal Counsel, National Association of Blue Shield Plans, and Counsel and Executive Director, California Medical Association. J. S. DeTar, M.D., past president of the A.A.G.P. moderated the panel.

Many wives of doctors were present at this session as well as other guests concerned with these important issues.

The business part of the meeting, handled by the Congress of Delegates, took place on Saturday, Sunday and Monday, April 15, 16 and 17. Missouri Academy Delegates, Charles Metz, M.D., St. Louis, and Roy Pearse, M.D., Nevada, were present at all sessions of the Congress. Dr. Metz served as a member of the reference committee on hospitals, which had a number of controversials matters referred to it for consideration and recommendation. Dr. Elvin Imes of Maryville and Dr. Barney Finkel of St. Louis, Alternate Delegates, sat in on the sessions of the Congress. Two other Academy members from Missouri who hold positions in the American Academy took part in activities specific to their appointments. They were William J. Shaw, M.D., Fayette, a member of the A.A.G.P. Residency Review Committee, and Walter T. Gunn, M.D., St. Louis, Chairman, Mead-Johnson Scholarship Awards Committee. W. A. Mullarky, M.D., St. Louis, presented an informative exhibit entitled "Dollars and Sense" showing the activities of the St. Louis Academy in holding informative meetings with medical students and

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1. Dr. Mullarky tends his "Dollars and Sense" exhibit. 2. Dr. and Mrs. Metz, Dr. Finkel, Mrs. and Dr. Pearse stop for chat. 3. Delegates Metz and Pearse attended all sessions. 4. The mortgage of the AAGP Building was burned ceremoniously. 5. Dr. Askey addressed the session. 6. Dr. Glover gets checked at one of the exhibits. 7. Dr. Gunn (center) was a visitor at Dr. Mullarky's exhibit.

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interns in the St. Louis area on general practice. Many other members of the Missouri Academy, from all over the state, were in attendance at the convention.

Some of the actions of the Congress of Delegates are as follow: Voted to petition the AMA Council on Medical Education and Hospitals to formulate two-year progressive training programs acceptable to the A.A.G.P. A policy statement contemplating this resolution was adopted, specifying that, to be acceptable to the Academy, the two-year family practice programs must include "obstetrics which progress through operative procedures and surgery." In addition to requesting that two-year family practice programs and general practice residencies include training in obstetrics and surgery, a resolution approving surgical training in a one-year general practice residency was adopted.

The Congress strongly endorsed departments of general practice in medical schools. The Delegates also requested that the Academy meet with medical educators to revise medical school curricula and correlate hospital training programs toward a streamlined practical and comprehensive whole patient approach in undergraduate training.

The Publications Committee was commended by the Congress for launching a new Academy publication, *Family Physician,* to carry the programs and philosophy of the Academy to nonmember general practitioners. Adopted without a dissenting vote, was a $5.00 increase in annual membership dues to become effective January 1, 1962, in order to provide funds for the Academy's expanded program for the future. A resolution was adopted urging the AMA to take leadership and set the pattern for state medical societies to assume responsibilities in administering the Kerr-Mills Law. A resolution was adopted strongly recommending issuance of comprehensive medical care and hospital policies with a deductible feature to provide more adequate coverage, help eliminate current abuses and to lower premiums of present day plans. A resolution was adopted requesting that all insurance plans be required to pay equal fees for equal services to all duly licensed and qualified physicians without discrimination. It was voted to grant certificates of approval to hospitals with approved general practice training programs. A resolution calling for at least two years of general practice as a prerequisite for specialty certification was rejected.

A resolution of condolence concerning the early and untimely death on April 11, 1961, of Charles E. Martin, M.D., of Ferguson, Mo., a past Treasurer and Chairman of the Finance Committee of the A.A.G.P. and past President of the St. Louis Academy and Missouri Academy of General Practice was adopted. This resolution was introduced by the Missouri delegates.

At a special luncheon on Tuesday, April 18, the paid-up mortgage on the headquarters building in Kansas City was burned by Dr. Albert E. Ritt, Academy Treasurer, in an official ceremony.

Dr. James D. Murphy, Fort Worth, Texas, was unanimously chosen President-Elect of the Academy at the Monday morning session of the Congress. An outstanding highlight during the meeting of the Congress of Delegates was the brief address made to the Congress by Dr. E. Vincent Askey, Los Angeles, President of the AMA.

The 1962 A.A.G.P. meeting will be held in Las Vegas, Nevada, April 6-13. It is not too early to begin making your plans now for that attraction.

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The Division of Health of Missouri

Live Poliovirus Vaccine

Considerable headway has been made in recent years in the development of an effective and safe attenuated live poliovirus vaccine to be administered orally. Such vaccine has been or is being used experimentally in various communities in eight states and eight foreign countries. Recent information indicates that some 74,000,000 people in Russia have been given 236,000,000 doses prepared from Sabin strains with apparent safety and effectiveness.

No manufacturers of live poliovirus vaccine have been licensed for the commercial production of this product in the United States. However, the U. S. Public Health Service is working closely with prospective manufacturers and scientists toward this end.

Although it is evident that oral polio vaccine will not be commercially available before next winter, if then, it seems appropriate to keep Missouri physicians informed regarding current knowledge and ideas related to this subject. This is particularly true in regard to those aspects dealing with possible future immunization programs. At present there is every indication that effective use of this vaccine will require the closest possible cooperation, coordination and understanding between practicing physicians and public health workers.

During the past few months, the U. S. Public Health Service has sent state health officers information and recommendations derived from reports of the Surgeon General's Committee on Poliomyelitis Control and its subcommittees. The following salient points, many of which are subject to modification, are taken from these reports:

1. First, and of most immediate concern, is the fact that the new vaccine will not be available before the 1961 polio season. Experience with polio in Missouri in 1959 and 1960 demonstrated that preschool children, especially those living in poor socioeconomic areas, are poorly immunized. Physicians and public health workers have a challenge and a real opportunity for community service in improving the immunization status in such areas, using the presently available inactivated vaccine.

2. Monovalent oral vaccine, given in three separate doses, is apparently superior to trivalent vaccine given in one or more doses. The tentatively recommended interval between the three doses (Types I, III, and II) of monovalent vaccine is six weeks. A more intensified schedule is recommended for newborn infants.

3. The optimal time to give the vaccine is between November 1 and May 31. This is to minimize "interference" by other normally occurring enteroviruses which are more prevalent from June through October.

4. The vaccine is stable for three years or more at –20 C. When diluted 1:10 in buffered saline for addition to a vehicle it can be kept for at least a week at ordinary refrigeration temperature (+4 C.). Vaccine may be incorporated in candy or simple syrup.

5. If initial supplies of oral vaccine are limited, it has been recommended that first priority be given to the control of epidemics and additional research investigations, second priority to immunization of infants and preschool children, and third priority to selected area immunization of those segments of the population that are least well protected.

6. When sufficient oral vaccine becomes available for general use, it has been suggested that a single strain be administered simultaneously on a community-wide basis, or conceivably even on a state-wide or nation-wide basis. The reason for this is that it would not only achieve better response to the program, but would also minimize immunization failures due to interference by contact-acquired infections with heterologous strains of vaccine virus. Such a program would require mass application of one type (I, II, or III) of vaccine within a two to three week period followed by similar application of the other types at appropriate intervals.

7. Any type of immunization is a medical procedure and any community immunization program should be under the direction of licensed physicians and/or official health agencies.

The last two items seem particularly signifi-

(Continued on page 604)

THESE 128,000 PEOPLE IN MISSOURI NEED MEDICAL HELP

Heart disease, cancer, mental illness—everyone knows the nation's three major medical problems. Do you know that alcoholism ranks fourth? In the state of Missouri there are at least 128,000 alcoholics. These people need medical help. No one is in a better position to initiate and supervise a program of rehabilitation than the physician who enjoys the confidence of the patient or the patient's family.

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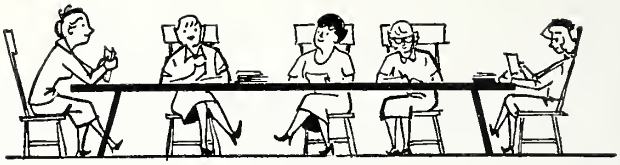
Woman's Auxiliary



The medical profession today is fighting to preserve those ideals of human dignity and responsibility which, in the past, have made our country great. We believe Americans deserve to be treated as free individuals, and not as wards of the federal government.

Mrs. Frederick E. Wade

The 180,000 physician-members of the American Medical Association are numerically a minority group in our country. On December 16, 1773 a minority of American Patriots organized the Boston Tea Party. Vastly outnumbered by the power of the mighty British Empire, the early patriots emerged victorious because their call for freedom awakened their fellow countrymen to their peril.

Our priority Auxiliary project today is to join forces with the medical societies in alerting and educating the people of our own communities on the facts regarding legislation, and proposed legislation, that affects the welfare of all our country. The passage of the Social Security medical care proposals could be won easily by default, as most people are uninformed or apathetic to what is being done.

The Kerr-Mills law enacted by Congress in the last session provides federal funds to assist states in expanding and improving their programs for health care of the aged. Action by the Missouri legislature is necessary before the program will go into effect in our state. Missouri House Bill No. 690 provides for the implementation of this program. The state legislative session ends on June 30, so write letters and urge your friends to write letters immediately to our state legislators, as the time is short.

Missouri House Bill No. 690 merits our support and that of our friends because it provides for health care assistance to every person needing it over 65 years of age, even if they are not covered by social security. It is a voluntary program, administered on a local basis, and therefore more economical to administer, and it maintains health care on the personal service basis which is essential to the real needs and dignity of our Senior Citizens. Our aged deserve to be treated as individuals, not as wards of the federal government.

We have asked each Auxiliary to sponsor "Operation Coffee Cup." This project consists of inviting our friends and neighbors to our homes for coffee and discussion of the current issues in health legislation, which affect everyone and not just the physician and his family. The American Medical Association has made a recording by Ronald Reagan for exclusive Auxiliary use for Operation Coffee Cup. Records have been sent to each Auxiliary and we hope you keep it constantly rotating in use among all your members. It will give a good opening for discussion, which we hope will be concluded with a personal letter writing campaign to both our state and national legislators. Mrs. Glenn O. Turner, 1462 South Dollison St., Springfield, our state legislation chairman, has charge of record distribution.

Operation Coffee Cup was suggested not only to assist in implementation of the Kerr-Mills program, but to oppose present proposed national legislation under the King-Anderson program, which provides for the extension of medical care under the Social Security Act. This program would provide free medical care to everyone on social security, whether they needed it or not, and would make no provisions for medical care for senior citizens not under social security. We think the King-Anderson proposals would be the first step toward socialized medicine, but those favoring this legislation claim we are misinterpreting it. We can only refer them to Webster's Dictionary, where socialism is defined as "a political or economic theory of social organization based on collective or government ownership and democratic management of the essential means for the production and distribution of goods, also a policy based on this theory." Governmental control and financing of medical care for our aged certainly seems to fit within this definition.

We are deeply concerned with the health needs of our senior citizens, and that is why we urge support of the Kerr-Mills program. Never

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Volume 58, Number 6—June, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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LOUIS L. TUREEN, M.D., *and*
RICHARD A. KRUMHOLZ, M.D., *St. Louis*

The Landry-Guillain-Barré Syndrome

Value of the Early Use of Steroids in Its Treatment

A series of cases with comments are presented calling attention to this not too infrequent syndrome which, if recognized and treated early, has early remission. Delayed treatment frequently results disasterously.

Drs. Tureen and Krumholz are from the Department of Neurology and Psychiatry, St. Louis University School of Medicine, St. Louis.

In our experience at the Hospitals of St. Louis University we have found the Landry-Guillain-Barré syndrome as described by Haymaker and Kernohan[1] to be a highly morbid and on occasion fatal disease, even since the introduction of ACTH and cortisone type drugs into the therapeutic regimen of this syndrome.

We feel that this is mainly a polyradiculoneuropathy, which may be circumscribed or widespread, and may either ascend or descend in the central nervous system to involve the cord and brainstem. The outcome is dependent upon the degree of involvement of the respiratory or cardiac nerve centers and the amount of nervous system damage done before termination or reversability of the disease process.

We prefer the name Landry-Guillain-Barré for we feel this denotes the syndrome in its entirety from the ascending type of flaccid paralysis as described by Landry through the various cranial nerve and sensory disturbances as described by Guillain and Barré.

Many authors have postulated with good experimental evidence the allergic basis for this disease state.[2, 3] Crozier and Aintly[4] have classified the Landry-Guillain-Barré syndrome into three etiologic areas: (1) those which follow previous bacterial or viral illnesses, (2) those which follow foreign protein therapy, (3) idiopathic. Other etiologic classifications list: (1) specific toxins, (2) dietary deficiencies, (3) heavy metal poisoning, (4) circulatory disturbances, (5) drug therapy and (6) post vaccination.

The pathology seen in this syndrome also reflects its apparent allergic nature. Grossly, one sees moderate edema of areas of the nervous system with slight vascular involvement. Microscopically, edema of the nerve bundles, congestion, increase in cellularity and tendency to focal accumulation of cells, beading of the myelin sheaths, and fragmentation of the axis cylinders are seen.[5] This edema and congestion gives obliteration of the perineural spaces which in return blocks absorption of spinal fluid per se, allowing water and electrolytes but not protein to escape. In addition, capillary change in this area permits seepage of protein into the cerebrospinal fluid. These processes are responsible for the albumino-cytologic dissociation of the spinal fluid that is seen in this syndrome. We also have seen early in some of our cases a lymphocytic pleocytosis and in certain instances normal cellularity and normal protein. We emphasize these facts because we feel that the clinical course is primary in the diagnosis; the albumino-cytologic dissociation which may or may not be present early is regarded as secondary in diagnosis. The degree of swelling and subsequent damage, and the type of structure involved, i.e., sensory or motor, will determine the clinical course of the disease.

As will be noted in the cases presented, pain in the back and legs is frequent. There is also proximal muscle weakness and various sensory disturbances. A large percentage of individuals with this syndrome have unilateral or more commonly bilateral facial nerve paralysis. Cranial nerves III, IV, V, VI, X and XII may also be involved. Approximately 50 per cent of the cases of Guillain-Barré will have cranial nerve damage. Deep tendon reflexes are either decreased or absent. It is frequently stated that sphincters are uninvolved, but we have not found this to be true. Sphincter involvement is not a uniform situation and is dependent upon whether the involvement is cord or a disturbance of the roots of the lower sacral nerves.

If cranial or peripheral nerve involvement does not reverse within a several week period, it may become permanent. This is in direct opposition to the original communication of Guillain, Barré and Strohl[6] who incorporated into their criteria rapid and complete recovery.

We have observed not only nervous system morbidity, but also death on one occasion as reported, and in two other cases seen by one of the authors (L. L. T.) and not included in this paper. Early death is either respiratory or cardiac, the specific factor being indeterminable at postmortem examination. We feel most of the respiratory deaths are due to failure of the intercostal musculature and pneumonia, while the cardiac failure is due to non-thrombotic myocardial infarction.

Treatment is supportive, with the early use of large doses of cortisone type drugs. The use of cortisone late in the course of the disease has met with poor success both in our experience and in that of other authors. We feel cortisone should be used at the moment the clinical diagnosis is made and in large doses, and continued until definite improvement is evident, and only then slowly tapered until discontinuation. There has been much written on the use of ACTH and cortisone in Landry-Guillain-Barré syndrome[7, 8, 9, 10] but none of these studies have been conclusive, since the disease may remit spontaneously.[11] However, under these conditions, a potentially advantageous drug cannot be withheld.

In the late stages, physical therapy and other efforts at rehabilitation and reassurance are mainstays of the therapeutic regime.

The cases to be presented are representative of the varied etiologic factors involved and the high morbidity associated with this disease.

CASE REPORTS

Case 1. A 54 year old white male was admitted to Firmin Desloge Hospital on April 12, 1960, complaining of numbness and weakness of both arms and legs, myalgia and inability to close the right eye. Three weeks earlier he had developed coryza, rhinorrhea, productive cough, headache and malaise. On April 5, numbness of the extremities first appeared; weakness became progressive so that by the day of admission to the hospital he could no longer stand or walk unsupported. The paralysis of the right obicularis oculi appeared on April 11.

Past history was irrelevant. Examination on the day of admission to the hospital, with the exception of mild pharyngitis, tenderness in both costovertebral angles, and blood pressure of 160/110, established deficits primarily in the nervous system. There was flaccid paralysis of both upper and lower extremities, primarily in the distal portions: bilateral footdrop, and inability to close his hands. Responses to all modalities of sensation were markedly defective in glove and stocking distribution affecting the hands and forearms up to the lower third of the latter, and the feet and legs to the knees. Deep tendon reflexes were absent; plantar stimulation was unresponsive. Of the cranial nerves, at that time, only the right facial nerve was paralyzed, and the sensory portion of the right trigeminal nerve was anesthetic. The right corneal reflex was absent.

Spinal fluid examination on the day of admission: initial pressure 125 mm. H_2O; clear fluid; one lymphocyte; protein 51 mg. per cent, sugar 78 mg. per cent, chloride 693 mg. per cent. Serology was normal. Hemogram, fasting blood sugar and blood urea nitrogen were normal. Blood electrolytes were normal. Urine contained 3 plus albumen; other elements were normal. Electrocardiograms and chest films were normal.

On April 13, his condition had worsened. Cranial bilateral involvement of the 3rd, 5th and 7th cranial nerves had developed, speech had become slurred, there was some difficulty in swallowing, and respiration was becoming somewhat labored. The paralysis of the extremities had become more severe. At this point a Drinker respirator was kept on hand for emergency use. Treatment with large doses of steroids was commenced. Seventy-five milligrams of prednisone was given daily, together with covering doses of potassium by mouth and antacids.

By the following day, speech had improved, danger of respiratory failure had passed, and the paralysis of the corneal reflexes had lessened. He could now move the legs and strength seemed to have returned to the arms. The daily dose of prednisone was maintained at 75 milligrams until April 18, when the tendon reflexes could be elicited for the first time, though weakly. At this point gradual decrease in the dose of steroids was instituted until he was receiving none by May 27, 1960. Spinal fluid on April 19 contained 110 mg. per cent protein and no cells.

At no time had there been urinary symptoms, although the urine contained leukocytes and albumen during the greater part of his hospitalization. He could sit in a wheel chair on May 24, could walk shortly thereafter, and was discharged on May 27 without medication. Motor and sensory function had partially returned to the extremities, and recovery of the cranial nerve functions ensued with the exception of paralysis of both sides of the face, which persisted at the time of his discharge.

COMMENT: This case typifies the usual onset and characteristic development of the disease following an upper respiratory infection. Once the symptoms developed, they progressed rapidly, affecting motor and sensory peripheral nerve roots, and particularly cranial nerves, in a fairly symmetrical manner. Bilateral facial paralysis is a common feature of the disease. In this case there was additional involvement of the oculomotor and trigeminal nerves, and possibly the glossopharyngeal. Respiratory muscles were becoming affected. Apparently the disease did not affect the spinal cord or brain stem. The spinal fluid protein, although modestly elevated early in the disease, later became high, but never as high as in the original descriptions. No pleocytosis occurred. Although the patient retained bladder function, there were albuminuria and leukocytes present, despite negative urinary cultures. This finding was characteristic of the majority of the cases to be described in this report. The early use of large doses of prednisone on this patient, we feel certain, interrupted the progression of the disease and reversed the symptomatology. Persistent facial paralysis was the only residual. This is a typical case of Guillain-Barré syndrome.

The three following cases similarly represent the characteristic development, course and prognosis of this illness. Case 2 manifested peripheral nerve signs, both motor and sensory, including cranial nerve paralysis, which became progressively worse until steroid therapy was instituted. At a later date following recovery, she suffered a relapse, an experience frequently observed in Landry-Guillain-Barré syndrome. Case 3 terminated fatally. We think this outcome resulted from a relatively late recognition of the disorder, with resulting delay in instituting steroids. Her course was unusually rapid. Case 4 ran a protracted course. Steroids were given relatively late in the illness, although considerable remission in symptoms occurred, persistent neurologic disabilities resulted from this illness.

As seen repeatedly in our cases, muscle pain, especially of the lower extremities was an early symptom in the disease course, along with facial paralysis.

Case 2. A 49 year old white female entered the St. Louis City Hospital on December 7, 1960, with the history of an upper respiratory infection one month earlier, followed in two weeks by a sensation of tingling in her feet and aching calf muscles. These symptoms increased in severity and were followed by weakness in both legs, rendering her unable to walk for a week prior to admission to the hospital. Four days after leg paralysis became complete, facial paralysis ensued. She was unable to close her eyes, smile or swallow and experienced difficulty in talking. She became incontinent of urine and feces for several days, this function returning by the time of admission to the hospital.

Pertinent past history indicated that she was subject to frequent upper respiratory infections, hypertension, post-prandial epigastric pain of one month's duration, and syphilis, treated 10 years earlier.

The patient was in acute distress upon entering the hospital, manifesting obesity and posterior pharngeal hyperemia on physical examination, other vital signs being normal. Neurologic findings demonstrated flaccid paralysis of both lower extremities, and weakness of her arms. There was calf tenderness bilaterally. Tendon reflexes were absent in the legs and arms. Sensation to pinprick and touch was absent bilaterally below the midcalf area, and moderately decreased over the remainder of the lower extremities and the upper extremities. Sensory loss of the distribution of both trigeminal nerves, motor loss of both facial nerves pointed to involvement of cranial nerves V and VII. Posterior pharyngeal anesthesia, with difficulty in swallowing, pointed to involvement of the glossopharyngeal nerves.

Spinal fluid examination showed a pressure of 210 mm. H_2O, no cells, protein 228 mg. per cent, chlorides 124 meq/100 cc. and sugar 70 mg. per cent. There was a leucocytosis of 14,000 with a normal differential count, a normal hemogram and normal urinalysis.

Prednisone 5 mg. two times a day was started on December 8, 1960. This was increased to 5 mg. four times a day December 9, 1960. On December 13, 1960, although the upper extremities appeared to become more weak the patient was able to close her right eye and had folds evident on the right side of her face. Physiotherapy was started on this day. December 16, 1960, dexamethasone 2.25 mg. four times a day was started and this was changed to prednisone 15 mg. four times a day December 19, 1960. By December 23, 1960, the patient had extremity function to a moderate degree. Muscle strength was steadily increasing and prednisone was tapered so that by January 11, 1961, it was discontinued. The patient was on antacids and potassium supplement during the entire cortisone treatment period.

Case 3. A 54 year old white female entered Firmin Desloge Hospital on July 24, 1960. On July 11, 1960, she had sustained a blow to the jaw which resulted in a fractured left mandible. She was admitted to St. Louis City Hospital on that date. Her admission history and physical examination with the exception of her fracture was within normal limits as were her laboratory studies. The fracture was repaired on July 14, 1960, and the patient was discharged on July 18, 1960, after an uneventful hospital course. Two days after discharge the patient noted pain in her thighs and experienced unsteadiness of gait. On July 24, 1960, she was admitted to Firmin Desloge Hospital with a chief complaint of low back pain and inability to walk without aid for the previous two days. At this time deep tendon reflexes were absent in the lower extremities and decreased in the upper. She had a good grip and no spinal tenderness. Blood pressure was 150/80.

X-rays of the lumbar spines were normal and the patient was put on bed rest with Bucks traction, and given phenobarbital. On July 26, 1960, she complained of progressive weakness and showed increasing anxiety about her condition. Skull films at this time were normal. Lumbar puncture showed no white cells, 2 red cells and sugar 132 mg. per cent, protein 162 mg. per cent, and culture which gave no growth. Pressures were normal. At this time blood pressure of 180/120 was noted. Urine showed a specific gravity of 1.022 with a ph of 5, negative for albumen, acetone and sugar, with 20 to 25 white blood cells per field. Hemogram was normal and serology was negative. Blood sugar was 158 mg. per cent and electrolytes were within normal limits. Neurologic examination at this time showed bilateral facial paralysis, markedly decreased motor strength in both upper and lower extremities, and vibratory sensation loss in the lower extremities. Because of increasing respiratory difficulty and apprehension the patient was put into a Drinker respirator. On July 27, 1960, spotty sensory changes were noted. The patient could not voluntarily void, her cough was weak, and her respirations which were weak were entirely diaphragmatic. At this time the patient could tolerate only 3 to 5 minutes out of the respirator and the blood pressure had risen to 230/160. The patient received general supportive respirator care and was started on 75 mg. prednisone in doses of 25 mg. every eight hours. The lungs at that time were clear. On July 28, 1960, she seemed somewhat improved although the bilateral facial weakness was still present. The electrolytes were normal and an electrocardiogram showed myocardial change and/or digitalis effect. Chest x-ray showed discoid atelectasis of the left basilar area. She did well throughout the day, but in the evening became dusky and died within a several minute period. Her airway was patent at this time.

Postmortem examination showed severe bilateral interstitial nephritis which we feel accounted for the acute rise in blood pressure.

COMMENT: There is one other case report in the literature[12] following a fractured jaw but we cannot establish a causal relationship between the fracture and the disease.

Case 4. A 59 year old white male was admitted to Firmin Desloge Hospital on February 6, 1958, with the history of progressive weakness of the right arm and both legs of two days duration. A rhinorrhea had proceeded these symptoms which were ushered in by aching of the back and both thighs. Initial examination demonstrated only neurologic abnormalities: flaccid paralysis of both legs and the right arm, with complete absence of all deep tendon reflexes. There were no sensory disorders at first. All cranial nerves were intact. Spinal fluid contained 99 mg. per cent protein, 794 mg. per cent chloride, 112 mg. per cent sugar, no white blood cells. Blood picture was normal. On February 11, because of progression of neurologic deficits, the spinal puncture was repeated and showed 172 mg. per cent protein, and no pleocytosis. At that time bulbar signs developed, requiring assistance in breathing from the Drinker respirator, where he remained almost constantly until February 21. At that time neurologic consultation was sought. Urinary incontinence was present.

Examination on February 21, 1958, showed flaccid paralysis of all four extremities, loss of deep sensibility, touch and pressure in the extremities, but with retention of pain perception. Deep tendon reflexes were absent. Abdominal and intercostal muscles were paralyzed. All cranial nerve functions were intact with the exception of the gag reflex which was absent.

Spinal fluid examination on February 24 showed continued elevation of protein at 154 mg. per cent. There was one cell in the spinal fluid.

On February 22, 1958, prednisone, 20 mg. daily was given until March 1, 1958. Concomitant with this treatment, progression of the illness stopped, and slow improvement ensued. Physiotherapy was instituted. On April 21, 1958, all sensibility had returned, but motor weakness remained severe and tendon reflexes were still absent. On June 1, 1958, he was able to sit up in a wheel chair. On July 20, 1958, he was able to micturate without use of a catheter, and he was able to ambulate with splints on his legs and support of a crutch. Slow improvement progressed, and he was discharged to out patient care in physical therapy on September 29, 1958. Two years later, residual weakness persisted in both upper and lower extremities.

Case 5. A 22 year old white female patient was sent to Firmin Desloge Hospital April 18, 1958 with a history of having had rubeola for nine days, twenty-five days prior to admission. This was followed in four days by urinary incontinence with numbness and weakness of both hands and arms. There was transient improvement, then recurrence to involve both lower extremities with flaccid paralysis and loss of pain, touch and temperature perception to the 4th intercostal space. There was involvement of bladder and bowel function. Her hemogram and white blood count were normal; spinal fluid showed 35 white blood cells, 14 per cent polymorphonuclear cells, sugar 55 mg. per cent, protein 94 mg. per cent, and chloride 125 meq. per liter.

Neurologic examination at the time of admission showed a decrease of the right palpebral fissure, with normal sized and equal pupils. The lower extremities were flaccid and paralyzed. All muscle groups were hypotonic. The abdominal muscles were paralyzed. Tendon reflexes of the legs were absent, of the arms hypotonic. A sensory level, with loss of all modalities of sensory functions, extended to the level of T_4.

Spine films were normal. Spinal fluid contained one white cell, 9 mg. protein, negative culture.

The ascending myelitis was progressing when treatment was started with aristocort 16 mg. a day. Three days later this was changed to prednisone, 20 mg. per day. By that time the neurologic status had become stable and the course of the disease was reversed. The full dose of prednisone was continued for ten days; then it was gradually reduced until discontinuation.

After eight weeks of hospitalization, with active and supportive care with physiotherapy, the neurologic examination showed residual spasticity of the left lower extremity with bilateral Babinski signs. There was absence of vibratory sensation of the left lower extremity, with full return of touch and pain sensation and of bladder and bowel control. At this time the spinal fluid showed one white blood cell, 20 mg. per cent protein, 54 mg. per cent sugar, 789 mg. per liter chloride and negative colloidal gold.

The patient was discharged eight weeks after admission much improved and at the present time is doing well, with minimal neurologic residual signs.

COMMENT: The symptoms of transverse ascending myelitis were progressing rapidly until steroids were administered. The dosage was adequate in this case. This patient, as do all our steroid treated patients, received antacids, and potassium. Frequent blood pressures recordings were made. After steroids were begun the symptoms became stabilized and then reversed.

The spinal fluid protein and cell count exhibited only a transient rise and then by the second spinal tap were restored to normal.

Case 6. A 57 year old white male entered a private hospital with a history of weakness in the legs, numbness, anorexia, vomiting and difficulty in voiding. He had been bitten by an opossum approximately eight weeks earlier; five days later he received the series of Pasteur treatment, consisting of 21 inoculations. His symptoms developed shortly after this.

On admission he was found to have a normal white cell count and hemogram. He had albumen and leukocytes in his urine. The spinal fluid contained 60 lymphocytes, 82 mg. per cent protein, and 61.5 mg. per cent sugar. He was given supportive care and discharged three weeks after admission as improved, but maintained an indwelling Foley catheter.

One month following his discharge he was admitted to Firmin Desloge Hospital with a history of increasing weakness. On examination he had weakness with paresthesia and anesthesia of both legs. He was incontinent of urine and feces. His paralysis was flaccid, with muscular atrophy. He had cutaneous sensory losses over the feet and anterolateral aspects of the legs (sensory nerve root distribution L5.S1). Loss of vibratory sense in both legs had occurred. Abdominal reflexes were absent. Plantar stimulation produced no response. He received physiotherapy and supportive care and when discharged could walk with assistance.

He then did well for six months at which time he again developed weakness, progressive for four weeks, until he could not get out of bed. On readmission he had difficulty swallowing, was found to be emaciated, apprehensive, incontinent of feces, and exhibiting wasting of muscles of hand, forearm, thigh and lower legs bilaterally. Babinski on the left was equivocal. Abdominal and cremasteric reflexes were absent. There was absent sensation to pin prick below T_{12} level with absence of light touch below the knees. A lumbar puncture at that time gave normal findings. He again received physiotherapy and supportive care and was discharged improved. A further follow-up is not available.

COMMENT: In this case, the allergic response to rabies vaccine produced a radiculomyelitis, in effect clinically much akin to the usual course of Landry-Guillain-Barré syndrome. It is interesting that in this instance two exacerbations of symptoms occurred; the first several weeks, the second many months after the onset of the illness. In this complication of the Pasteur treatment, the characteristic albumino-cytologic dissociation in the spinal fluid did not occur; rather a pleocytosis was present as well as the elevation of the protein. The course of the illness was self limited, as in most cases of Guillain-Barré syndrome, and not treated with steroids. One might conjecture what his course might have been had he been vigorously treated with them.

In this, the preceding and the following case, features frequently found in allergic encephalomyelitis are present. It is our opinion that the pathologic features in all these conditions are identical. An interpretation of the syndrome as an allergic manifestation of the nervous system reacting to antigenic agents, not unlike that seen in experimental allergic encephalomyelitis or allergic neuropathy makes the syndrome more comprehensible, and the treatment with steroids more rational.

It is pertinent that the clinical features of these cases, and the course of the disease gives a clue to the diagnosis. We do not depend on any specific feature of the laboratory findings, which may be variable depending on the clinical states when the patients are examined.

Case 7. A 30 year old white male entered St. Marys Hospital following a 10 day illness of weakness, fatigue, lassitude, difficulty in using his right arm and stiffness of the neck. Three weeks prior to the onset of these symptoms he had received his second polio vaccine inoculation in the right deltoid area. Following this he was found to have a generalized lymphadenopathy, with many atypical lymphocytes in the peripheral blood. Complaints included inability to walk, urinary disturbances and low backache. Examination prior to hospitalization revealed that except for the absent tendon reflexes in the right arm, the other tendon reflexes were hyperactive.

The positive findings in the hospital were all concerned with the nervous system. Generalized muscle weakness of the lower extremities and the right arm, with absent deep tendon reflexes of the biceps and triceps of the right arm and of the legs were found. The initial spinal fluid examination, shortly after entering the hospital showed pressure of 180 mm. of water, protein 80 mg. per cent, chloride 125 meq., sugar 68 mg. per cent, and 173 cells with 161 lymphocytes. Hemogram and white cell counts were normal, although a lymphocytosis was present. Heterophile agglutination was negative. An electromyogram showed anterior horn cell involvement.

Twenty mg. of prednisone was given for six days but symptoms continued to increase and by the tenth hospital day there was total flaccid paralysis of the lower extremities with a sensory level to T_8. There was inability to urinate. At this time he was started on a daily dose 100 mg. of solucortef which was continued for twelve days. A Drinker respirator was used intermittently during this time because of respiratory difficulties. Two days after discontinuation of solu-cortef a psychotic episode took place which was repeated during the ensuing week. Through this period the patient had cranial nerves VII and IX involved.

The remainder of the hospital course was complicated by pneumonia, decubital ulcers and pyelonephritis. With intensive physiotherapy he was discharged six months after admission.

Four months after discharge there was persistence of weakness of both lower extremities, with ankle clonus on the right, and foot drop on the left. There was vibratory sensation impairment. Bladder control was minimal. Anisocoria was present.

COMMENT: This case, like the preceding one, showed extensive radiculomyelitis, beginning at first as motor paralysis of the right arm, subsequently affecting the motor roots of both legs; cord symptoms developed, with eventual bulbar involvement, affecting not only cranial nerves but also the medullary respiratory centers. Symptoms followed inoculation with poliomyelitis killed virus, in our opinion, represents an allergic response to the protein inoculation, similar to other such cases reported. In view of the difficulty of establishing a diagnosis early, only moderate doses of steroids were used in a halfhearted manner, without significant remission of the disease. Only heroic measures of sustaining him during the critical periods of respiratory difficulties, psychosis and urinary tract infections saved his life.

Here too, pleocytosis appeared in the spinal fluid early in the disease, disappearing at a later date. The diagnosis of Landry-Guillain-Barré syndrome appears justified in this case. In both the sixth and this case, severe disabling residual disabilities have persisted requiring intensive physiotherapy.

Case 8. An 8 year old white male entered the Cardinal Glennon Memorial Hospital on April 20, 1959, complaining of steadily increasing generalized weakness of one week's duration. Eleven days earlier he had suffered a febrile episode of 24 hours' duration. On April 13, the weakness first appeared, accompanied by soreness in the calves and thighs. By April 19, there was generalized loss of muscle strength, clumsiness of the hands for fine movements, and ataxic gait.

On admission principal findings were neurologic: ataxic gait, generalized muscular weakness, diminished sensation in the lower extremities, involving particularly position and vibration sense, but also light touch and pain. The deep tendon reflexes were everywhere decreased. Hemogram and urinalysis were within normal limits. Spinal fluid was clear, contained 1 white cell, sugar 61 mg. per cent, protein 162.5 mg. per cent, chlorides 114 meg. per 100 cc. with negative culture and smear.

The clinical course was uneventful, the patient showing progressive improvement. He was discharged well on April 24, 1959, with the diagnosis of Guillian-Barre syndrome. No specific treatment was provided.

Case 9. A 12 year old female entered Cardinal Glennon Memorial Hospital on July 25, 1958, with the following history: Three months before admission she had suffered from rubeola, without any apparent sequelae. One month later she had received a poliomyelitis vaccine inoculation. Two weeks before entering the hospital, the patient had developed a low grade fever, followed in two days by a macular rash over the face, chest and abdomen. This lasted for 36 hours, and was accompanied by malaise, anorexia, severe headache and pain in both calves. Tingling of the hands and feet and difficulty in walking developed in the days before admission to the hospital.

The significant findings were weakness of the extremities, decreased muscle tonus, hypoactive deep tendon reflexes, with absence of the Achilles tendons on both sides. Hemogram was normal. Erythrocyte sediment rate was 5. Cerebrospinal fluid contained 2 white cells, protein 124 mg. per cent, sugar 35 mg. per cent, chlorides 120 meq. per 100 mm., with negative culture and smear. Urine porphobilinogen and uroporphyrins were negative. L.E. preparation was negative on two separate examinations. X-ray evidence of right maxillary and ethmoid sinusitis was obtained. Skull films, as well as films of cervical, thoracic and lumbar spines were normal. EEG on July 30 was normal.

The hospital course was slow. Treatment was symptomatic. When she was discharged on August 6, 1958, there was persistent weakness of the hamstring muscles bilaterally. On follow-up examination on September 11, 1958, complete recovery had ensued. A diagnosis of Guillian-Barre syndrome was made.

COMMENT: These two cases are typical of the cases usually seen in children: a milder course, with usually uneventful recovery. The etiology is unclear. Previous viral infections seem to play a role. Whether the poliomyelitis vaccine inoculation in this case played a part cannot be established. It is to be recalled that in Case 7 the role of poliomyelitis vaccine is also considered. In both of these cases in children recovery ensued without residual symptoms and without use of steroids.

SUMMARY AND CONCLUSIONS

Our purpose in reporting these cases is to emphasize again a clinical syndrome which is not rare in medical practice, and which is seen much earlier by the general practitioner and internist than by the neurologist. Since early recognition and treatment play a significant role in the prognosis, familiarity with the clinical course and laboratory findings, it is hoped, will shorten the period before definitive treatment is begun.

We have described three groups of patients in the nine cases reported. The first four represent elassical examples of Landry-Guillain-Barré syndrome, with involvement primarily of cranial nerves and peripheral nerve roots. The response to steroids, when given early, resulted in spectacular arrest of the course of the disease, with remission of symptoms.

The children reported in this series, showed milder symptoms in common with the reports of most writers. However fatalities have been reported in children.[13] Recovery in our cases occurred in a matter of weeks, with supportive treatment. We suggest that the course here too might have been shortened with the use of steroids.

The third group of three cases represent examples of radiculomyelitis of the Landry-Guillain-Barré variety. Some question might be raised about the diagnosis, with the contention that they represent examples of allergic encephalomyelitis. In addition to cord and medullary involvement these patients did not exhibit the usual albumino-cytologic dissociation at all times. Our contention is that the clinical course is the most significant feature in establishing the diagnosis. We believe that the spinal fluid findings in some cases may well depend upon when, in the course of the disease, the examination is made.

If we accept the allergic basis of the radiculitis there seem to be no justification for separating the groups into different categories.

The authors wish to acknowledge with thanks, the permission of Drs. John J. Budd, Jr. and Richard J. Dames to cite Case 7.

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WILLIAM A. LEO, M.D., ***Kansas City***

Acute Calculous Cholecystitis in Childhood

Report of a Case Simulating Acute Hepatitis

Gallbladder disease in children has been reported sporadically in the literature since Gibson first reported a case in 1722, but Potter was the first to review all previous cases. He reported 226 cases in 1928 and again reviewed another 206 cases in 1938.[12, 13] Ulin in 1952 reviewed the literature and found approximately 475 cases from 1722 to 1948 of which 326 were proven cases.[15]

A case report is given of acute cholecystitis with cholesterol stones in a 10 year old girl, including the differential diagnosis of jaundice in a child in addition to the unusual clinical and laboratory pathologic findings.

Dr. Leo was formerly with the Department of Surgery, Schoitz Memorial Hospital, Waterloo, Iowa.

Many cases of cholecystitis in children and young adults are associated with acute infectious processes such as scarlet fever, typhoid fever, measles and upper respiratory infections.[3, 6, 7, 8, 9] These disease produce acute cholecystitis without stones. They may be treated conservatively in many instances. Cholecystostomy or cholecystectomy may be necessary if conservative measures fail.[6, 7]

According to Gross the commonest cause of cholelithiasis in children is excessive excretion of pigments in the hemolytic anemias.[6, 7] Cholesterol or mixed stones are more unusual but may cause the same symptoms and complications as occur in adults.

The case presented is unusual not only because it occurred in a child 10 years of age but the gallbladder was gangrenous and contained many cholesterol stones. The disease process resembled acute hepatitis in many respects.

Case Report

B. P., a 10 year old white girl, was admitted to Schoitz Memorial Hospital, Waterloo, Iowa, on July 18, 1958, complaining of severe upper abdominal pain of 24 hours duration. She stated that the pain was more localized to the right and was associated with nausea, vomiting and fever. Her mother said she had been giving the child a proprietary gentian violet preparation for pinworms for several days prior to onset of her symptoms.

The child developed sudden onset of upper abdominal pain and shortly thereafter this was followed by nausea and vomiting. The pain became severe and spread all over the upper abdomen but seemed worse on the right side. She had not been exposed to any other toxins except the gentian violet and had not been exposed to any infectious illnesses among the family or friends. She was hospitalized in West Union, Iowa on July 17, 1958, and some laboratory data was secured. Her white cell count was nearly 25,000 with a shift to the left and an icteric index was 21. She was thought to be slightly jaundiced and the tentative diagnosis of acute hepatitis or gentian violet poisoning was made. She did not improve in 24 hours on conservative therapy consisting of antibiotics, bed rest and fluids, and because of the possibility of appendicitis was transferred to Schoitz Memorial Hospital, Waterloo, Iowa.

Past history revealed that she had been a healthy child but had been "sick to the stomach" occasionally the previous fall. Pinworms had been found at night the previous week and the mother started her on gentian violet.

Physical examination on admission revealed her temperature to be 100.6 F, pulse 100, respiration 24 per min. She weighed 91½ pounds. Her skin was slightly jaundiced and dehydrated and there was marked tenderness in the entire upper abdomen, especially the right upper quadrant with rebound tenderness throughout.

There was slight abdominal distention and the bowel sounds were hyopactive but not silent. A tender mass in the right upper quadrant was palpated on deep inspiration and was interpreted as liver edge. The remainder of the examination was normal including a rectal examination.

Laboratory values on admission revealed a white cell count of 23,000 with 86 segmented neutrophils, 5 lymphocytes and 9 stabs. The hemoglobin was 93 per cent; hematocrit 45 per cent; platelets 433,000. The prothrombin time was 21 seconds or 40 per cent; thymol turbidity 2.0 units, serum bilirubin (direct) 3.5 mg. per cent; cephalin flocculation (24 hours) 3 plus, (48 hours) 4 plus. Urine analysis was essentially normal. The serum transaminase was 950 sigma units. On July 19, 1958, the leukocyte count was 16,200 with 83 segmented neutrophils

Stools for occult blood were positive—no ova or parasites were found. The alkaline phosphatase was 13.3 Bodansky units. A chest film and abdominal scout film were normal.

Hospital Course. Following admission the child was placed on penicillin, streptomycin, chloromycetin and intravenous fluids. She did not improve on 24 hours observation and conservative treatment and her temperature spiked to 102 F. Because of continued signs of peritoneal irritation and leukocytosis which were thought to be unusual in hepatitis, and in spite of the markedly elevated serum transaminase and cephalin flocculation values, decision to do an exploratory laporotomy was made. The preoperative diagnosis was ruptured appendix with cholangitis. She was taken to surgery on July 19, 1958, and acute calculous cholecystitis was found with signs of early gangrene. Cholecystectomy was performed with some difficulty due to edema of the hilar structures and common duct exploration was attempted; however, the duct could not be safely located due to the intense inflammatory process and the procedure was abandoned. Cystic duct cholangiograms could not be done because of lack of patency of the cystic duct.

Because of the presence of adult cholesterol stones in a 10 year old child, further laboratory data following surgery was secured to rule out a blood dyscrasia or hemolytic anemia. The Coombs test was negative; red cell fragility was within normal limits; serum cholesterol was 178 mg. per cent. By July 27, 1958, the cephalin flocculation had fallen to 2 plus in 24 hours and 3 plus in 48 hours.

The child made an uneventful recovery and was discharged on July 27, 1958, her eighth postoperative day. Follow up for one year revealed her to remain in good health without symptoms.

The pathologic specimen consisted of a markedly congested thick walled gallbladder containing 174 combined cholesterol calculi averaging 0.2 cm. in diameter. The lining of the gallbladder was granular and gray-green. Microscopic examination of the wall of the gallbladder revealed ulceration of the mucosa which was covered with leukocytes and leukocytes infiltrated throughout the wall with much hemorrhage, edema and necrosis. Diagnosis: Acute cholecystitis with early gangrene; cholelithiasis.

Discussion

The diagnosis and treatment of acute cholecystitis in adults is well known to all physicians and, except for the controversy as to the optimum time to operate, the plan of management is quite standard. The disease is different in children, however, and must be managed differently. The foregoing case is presented because of the difficulty in arriving at the correct diagnosis and proper form of management.

Inasmuch as most cases in childhood are associated with an acute infectious process which secondarily affects the gallbladder conservative measures should be tried first.[3, 6, 7, 8] If the child does not readily respond to these measures, then surgery should be employed. The choice of the procedure must be made at the operating table and in most cases a cholecystostomy will result in rapid subsidence of symptoms. If any stones are present or the gallbladder appears gangrenous, cholecystectomy should be performed if technically feasible.

Common duct exploration is rarely necessary in children. Ulin states that jaundice is present in from 26 to 45 per cent of children having acute cholecystitis as compared to only 8 to 10 per cent in adults.[15] He further states that from 57 to 69 per cent of the gallbladders contain stones but only 6 per cent were found to have common duct stones. This would indicate that jaundice in a child having acute cholecystitis does not have the same significance as in an adult. Jaundice of the child with cholecystitis is most likely due to edema and inflammation of the biliary passages but in an adult one should first consider a common duct stone. In spite of this reassurance, however, common duct stones do occur in children and the common duct should be exposed whenever possible and observed for dilatation or palpable stones if stones are present in the gallbladder.

Operative cholangiograms in the presence of jaundice may be of value in the determination of common duct patency. It is not within the scope of this paper to describe the technic of operative cholangiography but ureteral catheters of various sizes have been helpful in cannulization of the small cystic duct for cholangiograms. They should be useful in performing cholangiograms through a child's small cystic duct.

The case reported was instructive in that the child had adult cholesterol stones and she was jaundiced. The diagnosis was made even more difficult because of the history of drug ingestion, and the elevated serum transaminase which pointed to possible hepatitis. The elevated serum transaminase was probably due to the intense inflammatory reaction of the gallbladder with secondary hepatitis from direct contact with the gallbladder. This is further borne out by the elevated cephalin cholesterol value which subsided following definitive surgery.

Summary

A case of acute gangrenous cholecystitis with cholesterol stones in a 10 year old girl is presented. This case is instructive because of the interesting differential diagnosis of jaundice in a

(*Continued on page 566*)

MICHAEL BERNREITER, M.D., ***Kansas City***

The Association of Wolff-Parkinson-White Syndrome and Paroxysmal Tachycardia in Two Cases of Ventricular Septal Defect

Two case reports of infants who showed the pattern of Wolff-Parkinson-White syndrome at birth, together with clinical evidence of congenital heart disease, and who developed paroxysms of auricular tachycardia which led to heart failure and death are reported. Both had ventricular septal defects.

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IT IS GENERALLY stated that the electrocardiogram is of little value in the diagnosis of interventricular septal defects, particularly in the first weeks of life, because the hemodynamics within the heart have not changed significantly enough to produce characteristic electrocardiographic patterns.

I recently have had the opportunity to observe the electrocardiograms of two newborn infants diagnosed as congenital heart disease, cyanotic type. The first electrocardiogram of each baby was taken within 24 hours and the second within 48 hours after birth. In both cases the initial electrocardiogram showed a pattern of Wolff-Parkinson-White syndrome and the following tracing gave evidence of paroxysmal tachycardia, which rapidly led to severe congestive failure and death in both cases. Autopsy in one case showed a defect in the membranous portion of the ventricular septum and in the other multiple defects in the muscular portion.

CASE REPORTS

Case 1. This baby boy was slightly cyanotic at birth. A loud systolic murmur was heard along the left border of the sternum. An electrocardiogram taken 10 hours after birth (fig. 1) showed Wolff-Parkinson-White syndrome. About 36 hours after birth the pulse became rapid, cyanosis was pronounced and signs of congestive failure progressed rapidly. An electrocardiogram at that time revealed paroxysmal auricular tachycardia with a ventricular rate of approximately 300 (fig. 2). Oxygen and digitalization did not reverse the rapidly downward course and the infant died about 42 hours after birth. Autopsy showed a large defect in the membranous portion of the ventricular septum.

Case 2. This newborn baby girl had respiratory difficulty at birth. Cyanosis was quite marked during crying spells. A loud systolic murmur was heard over

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CHOLECYSTITIS—Continued

child in addition to the unusual clinical and laboratory pathologic findings. Management of children with acute cholecystitis is discussed.

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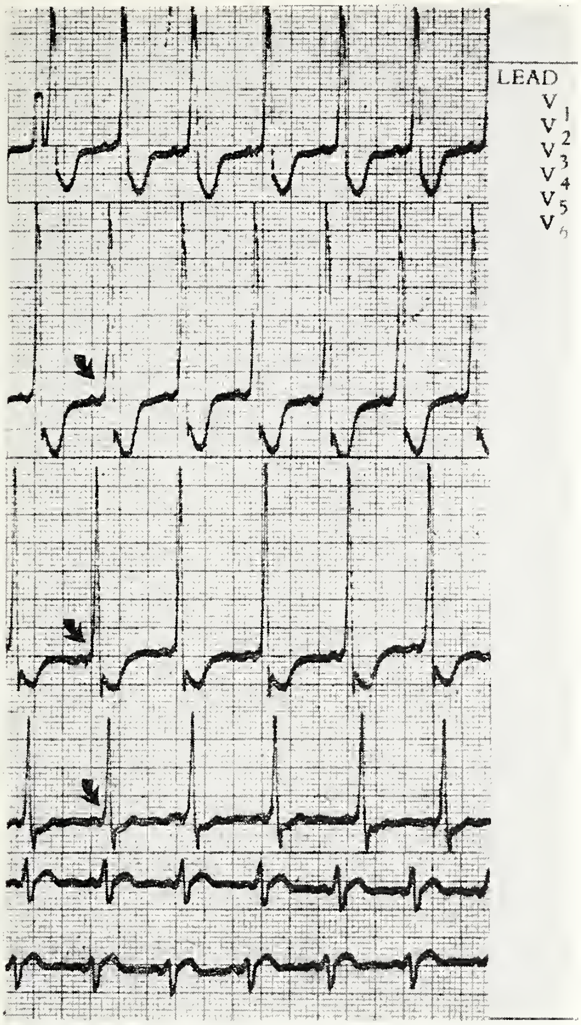

Fig. 1. This electrocardiograph (Case 1) was taken 10 hours after birth. Only the precordial leads are shown. The PR interval is .08 sec. and the QRS .11 sec. Delta waves are present (arrows). These findings are diagnostic of Wolff-Parkinson-White syndrome.

the entire precordium and was transmitted to the back. An electrocardiogram taken 20 hours after birth showed a Wolff-Parkinson-White syndrome (fig. 3). The infant did fairly well for the next three days when suddenly a severe tachycardia with a ventricular rate of 300 appeared. The electrocardiogram at that time revealed an auricular paroxysmal tachycardia (fig. 4). The condition of the infant became critical in spite of all measures taken to combat the deepening congestive failure and death occurred on the fourth day after birth. Autopsy showed multiple defects in the muscular portion of the ventricular septum.

Discussion

It is a well known fact that patients with Wolff-Parkinson-White syndrome are prone to paroxysms of tachycardia. While the Wolff-Parkinson-White syndrome in itself is a relatively benign condition, the accompanying paroxysms do occasionally lead to fatal termination, particularly if other cardiac abnormalities coexist. In the two cases reported the sudden appearance of severe paroxysmal tachycardia in the presence of ventricular septal defects resulted in rapid irreversible cardiac failure. In searching the English literature I have been unable to find similar cases. It is possible that the findings of Wolff-Parkinson-White syndrome and septal defect in the two cases reported here are coincidental. Nevertheless, it is advisable that in the presence of a Wolff-Parkinson-White syndrome in the newborn infant, one should consider the possibility of ventricular septal defect. If such a pattern is found at birth, and if other physical findings point to congenital lesion, rapid digitalization may prevent the paroxysmal tachycardia which in these two cases led to severe, irreversible failure and death.

Summary

Two cases are reported who at birth showed the pattern of Wolff-Parkinson-White syndrome. Both had clinical evidence of congenital heart disease, and both developed paroxysms of auricular tachycardia which led to severe congestive failure and death. Autopsy revealed ventricular septal defect in each infant. It is possible

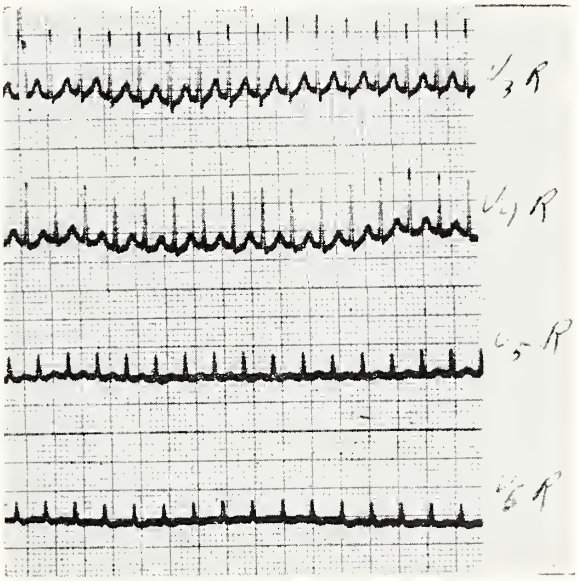

Fig. 2. This tracing (Case 1) was taken 36 hours after birth. Only the right precordial leads are shown. The findings are diagnostic for paroxysmal auricular tachycardia with a ventricular rate of 300. Death occurred six hours after this tracing.

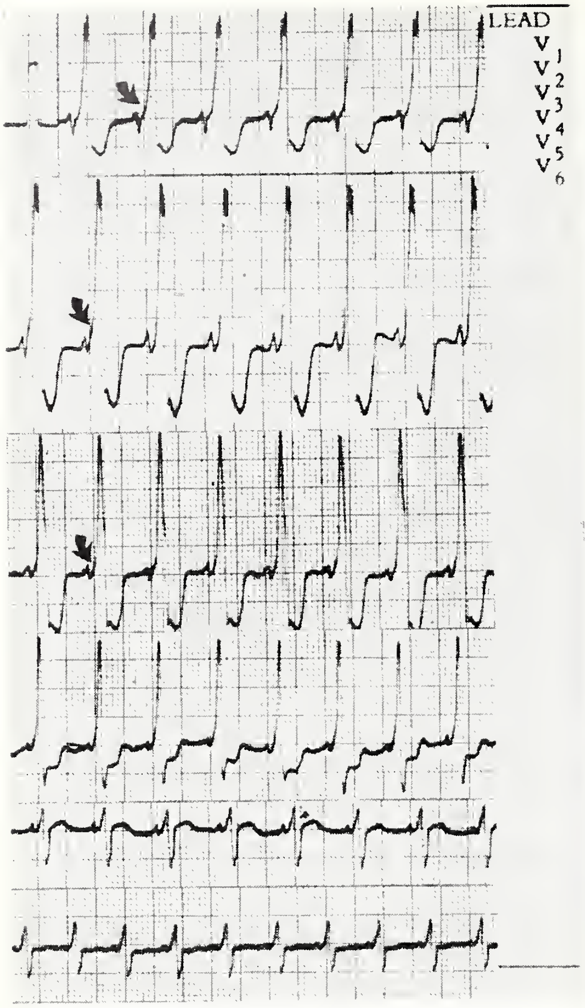

Fig. 3. This electrocardiogram (Case 2) was taken 20 hours after birth. The PR interval is .06 sec., QRS interval .11 sec. Delta waves (see arrows) are present. Diagnosis: Wolff-Parkinson-White syndrome. Only the precordial leads are shown.

that two conclusions can be drawn from these observations:

1. The Wolff-Parkinson-White syndrome, particularly type A, may in the newborn infant be associated with, in fact be caused by, interventricular septal defects.
2. Such infants should be digitalized in the hope that paroxysmal tachycardia may be prevented because these rapid rates in the presence of congenital heart disease may lead to irreversible congestive failure and death.

432 Professional Bldg.

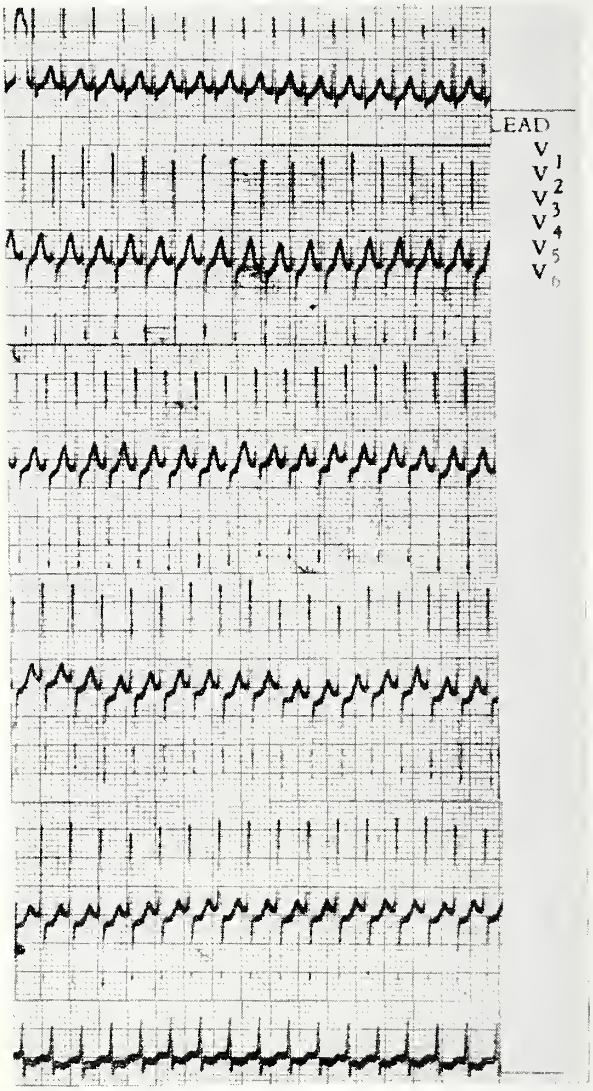

Fig. 4. This tracing (Case 2) was taken on the third day after birth. Diagnosis: Paroxysmal auricular tachycardia with a ventricular rate of 300 per minute. Only the precordial leads are shown. Death occurred 12 hours after this tracing.

DAVID DAVIS, M.B., Ch.B., D.P.M., ***Columbia***

The Physician-Patient Relationship

Involvement Versus Insight

The pitfalls that may arise in the physician-patient relationship are described and methods of avoidance are given.

Dr. Davis is Assistant Professor of Psychiatry at the University of Missouri School of Medicine, Columbia.

Voltaire has cynically remarked, "the doctor does not cure; nature cures; the task of the doctor is to amuse the patient until that moment arrives." If one were to take him seriously one could add that it is possible for the doctor to amuse the patient to such an extent that the patient comes to enjoy the amusement per se (delaying his eventual recovery), or like the British Queen Victoria in another context, fails to be amused at all.

These might be considered extremes. Yet the therapeutic process is, in a sense, a two-way street, with the patient projecting feelings and attitudes onto the doctor and and the doctor, if he is not careful, transferring to the patient his own suppressed desires. This is liable to happen to some extent in any interview situation, although it occurs especially often during the course of psychotherapy. For the unwary general physician, and indeed even for the psychiatrist, this process may result in certain reactions on the part of the doctor or the patient or both, which, if not recognized, may in the long run be detrimental to the patient's best interests. In this article I would like to point out some of the signs that indicate that a re-examination of the relationship between patient and doctor is necessary and some situations in which more specialized advice might profitably be sought.

Most physicians at one time or another have spent an inordinate amount of time talking with a patient. This experience is most common at the beginning of one's medical career but with some physicians may continue to occur from time to time. Some doctors have been known to spend as much as five hours at a stretch in this way, usually on the basis that they felt that the patient needed "to get something off his chest" and the doctor wanted to get it over with in one session. However, it is virtually impossible for the doctor to maintain therapeutic objectivity for such a length of time and, consequently, he is drawn into making remarks which, on reflection, he might have preferred not to have uttered, or because of his emotional involvement he misses significant features of the patient's talk. This is especially likely to happen (a) when the doctor is a man and the patient a pretty girl, (b) when the patient has a dramatic problem, often of a sexual nature, (c) with a dying patient when the doctor's own guilt feelings are involved, (d) in the case of the self-deprecatory patient who bolsters the doctor's self-esteem, or (e) when the patient has special knowledge of a subject which coincides with the doctor's own personal interests.

Such self-encroachment on the doctor's time may be a manifestation of what has been called the "furor therapeuticus" by O'Neill—the missionary zeal of the young M.D. to make the patient better. It may also be due to the common confusion between sympathy and empathy. Aring has pointed out that sympathy is the act or capacity of entering into or sharing the feelings of another, whereas empathy implies identification with the patient *plus* the awareness of one's separation from him. Of sympathy, Aring says, "The patient demands subtly or crudely and the physician either falls in with the demand or becomes annoyed; the patient prefers another doctor and the physician is hurt, or the patient becomes glad, mad or sad or even amorous and the physician follows suit and so on ad infinitum." As Michel de Montaigne has so vividly described, "The very sight of another's pain does materially work upon me, and I naturally usurp the sense of a third person to share with him in his torment."

Interviews of undue duration are one indication of emotional investment by the doctor which may have repercussions on the patient. The patient, being aware of the amount of time that the doctor has spent with him, may feel insecure in the relationship with the doctor, may feel that he has been able to manipulate the doctor, may feel guilty for taking up so much of the physician's time, or may try unconsciously to maneuver the doctor into repeating the performance and, if successful, taking up even more time. Where a woman patient is involved, the doctor's actions may be misinterpreted by her as a projection of her own interest in him (as a result of the transference phenomenon), believing that this long session is evidence of his added interest in her. As a result she may try to include him in parties and other social activities, indulge in seductive or coquettish behavior, or even make overt overtures to him.

Long hours spent with a patient in a number of interviews may be a sign of over-intellectualization by the doctor, an example of his mode of dealing with patients in general. Thus, a great deal of time may be lavished on a patient under the guise of treatment, discussing such topics as art, literature, philosophy, travel, topical events or politics, without the patient ever really having the benefit of warm feeling, emotional correction or understanding empathy.

The investment of time in patients reaches its most extreme form when the doctor postpones or even foregoes his vacations because of his patients. Here the doctor has become so involved that his dependent patients feel that they cannot manage without him and he in turn feels indispensable to them. He may even find that he is reluctant to refer the patient to other specialists for their opinion, averring on the one hand that he doubts the specialists' competence or on the other that he fears their ridicule. He has to tell his neurotic patients that "there is nothing really wrong with you" or "it's all your imagination" to keep up the illusion that he is an expert.

The doctor may well find himself cast in the role of an omnipotent father or mother so that he continually makes decisions for the patient concerning all nature of subjects—legal, marital, financial and others. As Aring comments, for such a doctor "not to know is a threat to his hampered personality, as it is to admit that there may be others whose competence extends into realms where he himself is not particularly interested."

In particular, where the doctor finds himself taking sides in a marital conflict, he may have become a pawn in the tactical maneuvers between husband and wife, the one using him in the battle against the other.

Physicians who are too sympathetic with sick people may pamper their patients to the extent that the patients begin to find pleasure in sickness which prolongs convalescence. Sometimes, in such situations, patients try to defend themselves against the anxiety of being ill by regressing to dependent states reminiscent of infancy and childhood when the all-powerful parents catered for the child's every need. This effect is further heightened by the fact that patients who are sick are often put to bed (where they feel even more helpless) and an authoritarian regimen is prescribed for their care. All have a longing, albeit unconscious, to be taken care of, and a yearning for things past. In some doctors, this may arouse a kind of envy, so that their attitude becomes one of contempt for the patient who seeks sympathy (particularly in the case of patients seeking financial compensation), or the doctor may simply become frustrated because he can never really take the place of a parent.

With those doctors who react too sympathetically, however, the patient may begin to test the limits of the dependent relationship with the doctor and becomes increasingly demanding and dependent. This often leads to frequent inappropriate telephone calls from the patient, to other acting-out behavior such as the sudden production of symptoms which would appear to require the doctor's urgent attention (e.g., asthmatic attacks at 4:00 a.m.), or to excessive demands for medication. Such demands may cause the doctor to become irritated and hostile; the patient regards this as evidence of rejection so that he, in turn, reacts by becoming angry with the doctor. The doctor then finds himself with a most difficult patient on his hands, whom he regards as ungrateful.

Every physician must resist the importunities of some of his patients for more and more medicine, and Brown has recently pointed out that, if the doctor is the kind of person who is unable to say "no" he is liable to give too much medicine to demanding patients or to keep changing the prescriptions of those who play on his sympathy. In this connection the physician may find that he also keeps changing his approach to treatment so that he runs the gamut of being alternately threatening, exhortative, comforting, encouraging and promising. Patients occasionally use illness to provoke the doctor and unconsciously refuse to get well. They continue to call on the doctor and stay around to show him they are not yet cured. As O'Neill puts it, "A continuing illness is a silent accusation against the doctor," and the doctor may therefore desperately try one remedy after another.

This may be another manifestation of anxiety to please on the doctor's part, or of that old friend the "furor therapeuticus." The patient may need an ongoing relationship which the physician cannot provide or has no faith in, but, as Aring says, "When his (the doctor's) tokens of relationship—namely pills and palaver—run out, he is in a sense bankrupt." Yet the doctor may have strong conscious or unconscious desires for fame and fortune, and a great need for cured cases to boast about or expect others to boast about for him and, as a result, he often becomes impatient with those patients who do not respond or even, in an open or concealed fashion, angry and resentful toward them. Actively disliking or being irritated by a patient is an obvious sign of disturbance of interpersonal relations.

Sometimes with neurotic patients whom the doctor feels are too sick or too difficult for him to handle or to understand (as, for example, when the patient expresses fears of homosexuality or hints at problems which the patient is reluctant to discuss), the doctor becomes angry and even impatient and hastily discharges the patient from care. At one time, a "sign" for hysteria was described which consisted of a curling-in of the thumb and clenching of the fist, manifest, however, in the doctor, not the patient! It seems that this was the kind of case where "la belle indifference" in the patient produced "quelle belle difference" in the doctor.

Patients sometimes defend themselves against the arousal of guilt feelings by the technics of trying to make someone else feel guilty, and thereby feeling less guilty themselves. Thus, as a result of something the patient says, or the manner in which the patient acts (e.g., by weeping), the doctor may be made to feel guilty about having said or done something, about not having said or done something, or for not having achieved a cure. This unconsciously manipulative behavior by the patient may cause the unwary doctor to become emotionally involved and destroy the empathy so necessary for the proper treatment of the patient. The giving and receiving of gifts in this connection may be an attempt to atone, but for the doctor to accept such gifts from a patient may mean that he comes nearer to social friendship or obligation than he would wish; to refuse, however, may make him appear rigid and cold, so that it is necessary for him to delve beneath the surface and ask himself *why* the patient is giving him this kind of present at this particular time. As a rule, the more expensive the gift, the more advisable it is to refuse.

Yet, it is not always the patient who gives the gift. Sometimes, it is the doctor. Should he feel the urge to do this, he would do well to have second thoughts about it. For example, if he contemplates giving a book, sometimes a glance at its title in its literal sense may give him a clue to his motivation; e.g. "The Reprieve," "Sons and Lovers," "I Remember Mama," "Strangers When We Meet" or "Advertisements for Myself," which might well indicate that the doctor is becoming or has become more emotionally involved with the patient than he has realized.

However, a word of warning may be necessary for the enthusiastic physician who may see too much in a patient. He may believe that the patient has certain conflicts which are not present or are of little consequence in an attempt to alleviate his own anxiety over some conflict of his own by imputing that conflict to the patient in an even greater degree. By this means his own conflict seems unimportant by comparison. On the other hand, he may be unable to see problems at all because he does not wish to see them in himself. Thus, many are the pitfalls of the doctor-patient relationship wherein the unsuspecting doctor may become emotionally involved in the relationship to the detriment of the patient and with a loss of the doctor's priceless time. Lengthy interviews, giving up vacations, making arbitrary decisions outside one's province, oversympathizing with patients, making frequent changes in treatment, being angry with patients, feeling unduly guilty about patients, giving or accepting expensive gifts may all be indications of an unhealthy atmosphere existing between the doctor and his patient and may well indicate that a re-evaluation of the doctor's attitude toward the patient is necessary. Such self-evaluation cannot but ultimately benefit both parties. As Schiller has so aptly said:

> To know *thyself*—in others self-concern;
> Would'st thou know others? read thyself—
> and learn!"

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Drug Resistance Is Increasing

Tuberculosis Abstract

Studies in the United States and in Great Britain show that drug-resistant tuberculosis in previously untreated patients is on the increase. The public health as well as the clinical implications of this problem must be considered in planning programs in the future.

The abstract is furnished by the National Tuberculosis Association and is from an article by James W. Raleigh, M.D., which appeared in the Bulletin of the National Tuberculosis Association, January 1961.

If tuberculosis is to be eliminated, timing is vital. The principal drugs, streptomycin, isoniazid, and PAS (para-aminosalicylic acid) must be brought to bear while their potential is still at its height and before their value goes swirling down the drain with the widespread emergence of drug-resistant strains of tubercle bacilli.

The present situation with respect to infection by drug-resistant tubercle bacilli is by no means entirely clear.

In 1952, the Veterans Administration-Armed Forces Study Group reported on the initial streptomycin susceptibility pattern of more than 2,000 tuberculosis patients admitted for treatment during the previous year who had no prior chemotherapy. Just over 2.5 per cent of these patients yielded cultures showing "primary," or pretreatment, resistance to streptomycin. It was concluded that streptomycin-resistant tubercle bacilli, however much of a clinical problem they might be, had not yet become an epidemiologic factor of importance.

INCIDENCE UP

In the Veterans Administration-Armed Forces 1957 study, the incidence of drug-resistant tubercle bacilli in untreated patients was up to 5 per cent. The Medical Research Council of Great Britain in a similar survey of previously untreated patients found primary drug-resistant strains in almost 4 per cent of those tested.

Later reports are even more disquieting. In 1958 two committees of the International Union Against Tuberculosis studied the occurrence of drug-resistant tubercle bacilli in patients admitted consecutively to 72 tuberculosis treatment centers in 17 different countries of Asia, Europe, North and South America. Among 1,400 patients who had had no chemotherapy prior to admission, the incidence of drug-resistant tubercle bacilli ranged from 2.7 per cent to 19 per cent and averaged 6.5 per cent. The United States was well above the average with 8.7 per cent. Simultaneous resistance to two drugs occurred in 1.5 per cent; resistance to all three drugs was rare, but all five cases reported were from the United States.

The incidence of bacilli resistant to streptomycin, isoniazid, and PAS in patients with no history of previous treatment is, therefore, on the increase. If the 8.7 per cent incidence is correct for the nation as a whole, and if we have 75,000 new active cases of tuberculosis reported annually in the United States for the next few years, then each year at least 6,000 of the new cases will yield bacilli resistant to one or more of the three major drugs; roughly 2,500 resistant to isoniazid, 2,500 to streptomycin, and the remainder to PAS.

The U. S. Public Health Service has calculated that among the 36 million individuals in this country now infected by tubercle bacilli but not yet ill, the new active case rate will be approximately 85 per 100,000 population per year for the next four or five years. If these relationships hold true, 6,000 new active cases of tuberculosis with drug-resistant bacilli are actually a reflection of more than 7 million individuals now infected by such bacilli, but not yet manifestly ill with tuberculosis. If the evolution in this group from infection to disease is more frequent or more rapid than usual, the population infected with resistant bacilli may be less than 7 million; if, on the other hand, this transition in those infected with resistant bacilli (particularly isoniazid resistant) is slower or less frequent, the reservoir of drug-resistant tuberculous infection may be even greater than 7 million.

Thus, it seems inescapable that in the drug resistance being discovered with increasing frequency among previously untreated patients, we are seeing only that small segment of the iceberg that rears above the surface.

(Continued on page 610)

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HON. THOMAS B. CURTIS, ***St. Louis***

Medical and Health Care for the Aged

A Special Article

The present status of care for the aged is discussed and the pressures that are being brought to bear on changing the methods for this care are pointed out.

Mr. Curtis is Representative in the Congress from the 2nd District. He is Senior Republican House Member of the Joint Economic Committee and is a member of the Ways and Means Committee.

This address was presented at the annual banquet of the Missouri State Medical Association, March 21, Kansas City, during the 103rd Annual Session.

I HAVE WRITTEN and spoken so much on the problem of health care for the aged that I wonder if there is anything new that I can say.

I suppose the only thing new is updating that which is old. The fact remains that today the public has still not been apprised of what the true problems in this area are.

Some of the blame for this situation must rest with the representatives the people have elected to the Congress to look into these matters in their behalf and report back with accuracy what they have found. Some of the blame must be borne by the appointive officials in the federal executive departments not reporting the situation with accuracy to the people. Some of the blame must be borne by the civil service officials in the federal executive departments not giving out accurate public information.

Some of the blame must be borne by those of us who have tried to report back what we thought was the true picture. We must be blamed because for some reason or other we have not gotten our message to the people.

However, the blame essentially rests with the reporting media of our country. I documented this charge in a speech on the floor of the House of Representatives entitled "Lobbying and Reporting: The Future of Representative Government in the United States," on May 2, 1960.

There seems to be no excuse for the media—as radio, television, newspapers, weekly magazines are referred to these days—not reporting all sides of the question accurately. This the media by and large has not done. It has persisted in reporting one point of view alone and, worse still, misreporting the position of those who oppose the social security approach to meeting the problems of the older person in the field of health care.

Some of the media is now engaged in attacking the integrity of the various pressure groups in our society who are opposed to the social security approach of health care for the aged because, apparently, they have found out that in spite of their false reporting the truth has been seeping through to the people.

Why does not this group in the media attack the arguments and facts presented by these pressure groups instead of the democratic process these groups are following of getting their views across to the Congress? There is everything right and nothing wrong about pressure groups expressing their views in a representative form of government. That is the essence of democracy.

Is this group fighting this healthy process of representative government? I suspect they are, consciously or unconsciously. If the people cannot operate through lobbies or pressure groups, or through political parties, the media itself can control the relationship between the people and their representatives whom they elect to Congress.

I want to thank the doctors for being active politically, not just on this important issue of health care for the aged and preserving the system of health care which has given to our society the finest health of any society in history, but for being active on other matters of social importance. I might say I commend the COPE of the AFL-CIO along the same lines. The only quarrel I have with the COPE is over their use of propaganda rather than the truth to get across their point of view. I quarrel with any lobby or pressure group when it abandons truth in favor of propaganda.

May I try to restate the problems I see in this area of health care for the aged. Sometimes a restatement of the case does bring out new things.

First, we have a problem of health care for the aged primarily because we have such an outstanding system of health care in our society.

The base of the problem of health care for the aged arises from the fact that we have so many old people still with us. The reason they are still with us is because of the great advancements made by our society in the field of health.

This fact alone should still the argument frequently advanced in favor of placing health care for the aged under the system of social security, that something must be done. The answer to that argument is that something is being done, something has been done and things may still move forward fast if we watch where we are going.

Some people have said, "but we can't beat the Forand Bill or the Kennedy Bill to have the social security program take care of the health care for the aged with nothing. We must have an alternative proposal." How blind these people seem to be. We have a program, the greatest program of any society in history. It has been the success of that program, not its failure, that has brought on the new problems we are faced with in health care for the aged.

The first task is to understand what we have and what we are doing. It is in this area that the media and those who support the social security approach have been the most shameful in their inaccurate statements.

If we can once establish the fact in the minds of our people that we do have a health care program in our society and that it is the greatest in the history of the world, we can then move forward with a discussion of how we can make it better. But until that fact is established we are wasting our breath. Make no mistake about it, the supporters of the social security approach to health care for the aged have never admitted that this is true. Quite the contrary, their efforts have been to cleverly undermine the people's belief that this is so. They have attacked the integrity of the medical profession, of the drug profession, of our hospitals, of the insurance companies—all of the people who are responsible for our present advancements and upon whom we must rely for future progress. They have attacked the integrity of these people, note, not their arguments, not their facts.

If the people do not believe in your honesty to what avail are your statements of logic and fact to them?

The doctors must wake up to the fact that it is their integrity that has been attacked and that it is on this basis that the promoters of the social security approach to health care for the aged expect to persuade the people to back their theories of meeting the social problem.

The problem of our older people in obtaining adequate health care is not just a problem of their personal budget. Indeed, the main problem they face is the same problem that we all face in the health field. It is the problem of medical science continuing to advance to find out new cures, new drugs, new ways of treating health problems. It is the problem of getting new hospitals, new equipment, new technics. It is the problem of spreading quality advancements in these areas quantitatively throughout our society.

I emphasize that our older people share this problem with all of us and it is the greatest problem of the aged as well as the greatest problem of us all in maintaining our health. Anything that destroys or weakens our system of coping with these problems in this area in the guise of meeting problems in other areas of health care is a net loss.

This must be understood, because it is not false but true to point out that placing health care for the aged under the social security system leads to socialized medicine. Socialized medicine will destroy this basic system of ours upon which we rely to meet the most important problem in the health field.

I will not argue in detail the reasons why the social security approach leads to socialized medicine. I will merely restate the bare bones of the case. If the social security system is to pay for health services, the Social Security Administration must be made responsible to see that these services are provided at fair and reasonable costs. The Congress is duty bound to see that federal funds are spent efficiently. The Forand Bill properly included a provision that the Social Security Administration should enter into contract with doctors and hospitals in respect to their fee schedules. Though the bill also stated that an older person could have the doctor of his or her choice, this became no choice at all if the doctor had not agreed with the Social Security Administration on his fee schedule. Doctors are out of the Kennedy bill, but hospitals and other health facilities are in and the same provision must apply to them.

It takes little imagination to understand what happens when a federal bureaucracy gets into the business of setting fees and schedules of the health institutions. This is socialism.

Adequate facilities such as nursing homes,

homes for retirement, and skills such as practical nurses, visiting nurses, occupational therapists and rehabilitation personnel, which are now lacking, are the primary need of the older people. These needs are ahead of budgetary needs, and indeed a fulfillment of the requirements needed will do more to bring down the cost of these facilities and services than anything else. The social security program can do nothing to help get more facilities and more skills. Our private enterprise system can and is doing this. Certain federal programs can help. I am the author of one such program—FHA for private nursing homes which meet high standards of safety, health and efficiency. I have supported in the past extension of federal aid for vocational training in the field of practical nursing.

This program needs extension and needs to be expanded to include the skills relating to rehabilitation and home care.

Lack of diversity and adequacy of health insurance for the aged presents the next great need for the aged. Neither the Social Security Administration nor any federal agency is well suited for going into the insurance field. Great progress is being made in this area and a little public awareness of the importance of such technics as deductible health policies, catastrophic illness policies, and insurance pooling so that a person does not collect more than once for the cost of the same health treatment will help to advance the insurance program which already is growing by leaps and bounds. Furthermore, awareness on the part of the public of the importance of prepaid health insurance taken out in the earning years to be used in the years of retirement will help. There need to be more labor management contracts which provide that health insurance does not terminate when the employee retires, but rather that the insurance continues, but the premiums cease. Great advancements have been made in our society in the last five years along all of these lines and will continue if we do not tamper with our system.

Then when we get to the area of the older person's budget we will find that a great deal of misinformation has been fed to the public about the older person's need. Emphasis has been placed on the fact that health care for the aged costs more for the older person than any other age group in our society. This is true, but every other item in an older person's budget costs less—food, clothing, recreation, rent (because most of our older people own their own homes), interest (because they have paid for their furniture and washing machines), education.

There are some older people who need help. The greatest and best kind of help to give one of the largest segments of this group is to remove the limitation in the social security laws on what they may earn in a year without losing their social security benefits. That is what many of the older people have been asking Congress to do. If this is done, they say, "we can take care of ourselves, if you please, and we do not want or need the government."

Another big segment of the older people who cannot take care of their own bills are being cared for under old age assistance and other programs. Many of these citizens are past the point of caring except to be cared for. This is the area in which the Congress did provide some added assistance in the last session.

When we boil the matter down to where the real needs are we find they are quite within the capabilities of our present programs to care for and not in a degrading way as some of the promoters of the social security approach would have us believe.

As a matter of fact the social security approach to health care for the aged would be a step backward in our method of providing for the older people. We adopted the social security "insurance" system as an improvement over old age assistance to a large degree to get away from what was called the degrading means test which required the social worker to budget the older person on what he could eat, wear, have as recreation and such. The theory of social "insurance" was to pay the older persons cash and let them budget for themselves. I think we all agree this is an advancement. Yet here the Social Security Administration, if it handled health care, would get back into the budgeting process. Instead of giving the older person cash, we would give them health services budgeted by the Social Security Administration in Washington, D. C.

Time is on our side, because truth is on our side. We must continue to try to get the facts and arguments to the people on this important issue. Once they understand it, I am satisfied we will hear no more about expanding the social security system to meet the problems of health care for the aged. As a matter of fact, we will not even have to advance arguments if we have a few more years, because in that time the advancements we see going on all around us to meet this problem will have eliminated it.

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Name______________________________

Address____________________________

J. H. Summers, M.D.

President's Message

A resolution passed by the House of Delegates, while important, cannot in itself accomplish a thing. Further, the introduction of a bill in the legislature in itself may not accomplish much.

The House of Delegates did pass the resolution to do all possible to implement the Kerr-Mills act in Missouri and two bills have been introduced, H. B. 633 and H. B. 690. A subcommittee of the House Committee on Social Security is studying both bills, and may have reported and action may have been taken by the time of this publication.

But what I wish to stress is that no resolution, no bills introduced can assure compliance with the action of the House of Delegates, the voice of the Association. Members must continue to work, as they did at the time of the meeting of the House of Delegates, not with other members but with their friends and acquaintances in the legislature. We constantly hear that the grass roots are where things are accomplished, but those roots must make themselves heard. The House of Delegates, through its elected delegates, placed an obligation on every member of the Association. Let's see it through.

J. H. Summers, M.D.

EDITORIALS

WORKING-LIFE EXPECTANCY RISES BY ONE THIRD

"Added work years are one dramatic result of better and wiser use of medical care," summarizes a recent report by the Health Information Foundation.

In the Foundation's April issue of its monthly bulletin, *Progress in Health Services,* it states that one of the most important results of medical progress in this century has been a large increase in the average American's working life expectancy.

Whether the appeal for longer working life is general or not today may be questionable, but facts and figures to prove that it is are given. It is pointed out that an American male baby born in 1958 had a working-life expectancy of 42.3 years—11.2 years more than the comparable figure for a baby born in the 1900-1902 period.

In terms of manpower potential, the Foundation report stated, "a group of 100,000 males born in 1900-1902 could expect to put in an average of 3,106,000 man-years of work during their lives. By 1939-1941 the comparable figure was 3,815,000 man years, and by 1958 it was 4,228,000. Thus the working-life expectancy in man years of a group of 100,000 male infants has risen by more than one million since 1900-1902, or approximately one third."

Other sidelights presented on what the increased span has brought is that young men now enter the labor force more than two years later, on the average, than was true at the turn of the century. And during the same period retirement-life expectancy has more than doubled—from 2.7 years for a 20 year old male in 1900 to 6.3 years in 1958.

According to the Foundation, the increases in both working and non-working years are part of a larger trend—the "remarkable increase in life expectancy." Life expectancy for males at birth rose from 47.9 years in 1900-1902 to 66.4 in 1958, or by 18.5 years. The effect of this increase has been to add years not only for work but also for additional education and retirement.

The working-life expectancy of American females has also increased sharply in this century, from an average of 6.9 years at birth in 1900-1902 to 19.9 years in 1958. This trend, said the Foundation, has been largely due to two factors; a substantial rise in the proportion of women who work and, to a lesser extent, a decline in mortality.

Philosophizing on the meanings of this increased amount of working time, it is pointed out that longer working-life expectancy "has been of basic importance in increasing both national and personal income." It is also pointed out that the nonproductive or dependent years today are no greater as a proportion of total life expectancy than was true in 1900. Because of the increased number of employed women, the number of non-working years by men and women as a proportion of total years of life has actually decreased. By these measures the time for education of the young and retired leisure for older people, while longer today than in 1900, is less of a drain on income during employed years.

The report concludes that "the opportunity remains for further improvement as the public takes greater advantages of modern health services."

SURVEY MADE OF HOSPITAL CHARGES

Charges for basic hospital services—room, board, routine nursing care and minor supplies —average from $15.00 to $20.00 a day in hospitals across the nation, a recent American Hospital Association survey showed.

The survey is based on figures obtained from 4,692 short-term nonfederal hospitals, 94 per cent of 5,455 such hospitals listed by the American Hospital Associations. The hospitals surveyed totaled 543,758 beds.

While rates vary widely according to type of accommodation, hospital size, ownership and geographic area, more than half of all beds (54 per cent) were shown with accommodations within the range of $12.00 to $20.00 per day; 27 per cent showed a range of $20.00 to $28.00; 15 per cent showed below $12.00 and 4 per cent showed $28.00 or over.

Among hospitals classified by number of beds, there was a steady and marked increase in average charges with increasing size of hospitals for three categories: single bed, from $13.00 in hospitals of less than 25 beds to $24.50 in hospitals with 500 or more beds; two bed, from $12.40 to $19.20, and four bed, from $11.90 to $18.70.

Ramblings of the Field Secretary

The symposium on "The Early Care of Multiple Injuries" held at the University of Missouri Medical Center on April 6, 1961, was well attended by physicians from various areas of the state and exhibited a type of program that undoubtedly will command increasingly greater interest as similar programs are held in the future over Missouri.

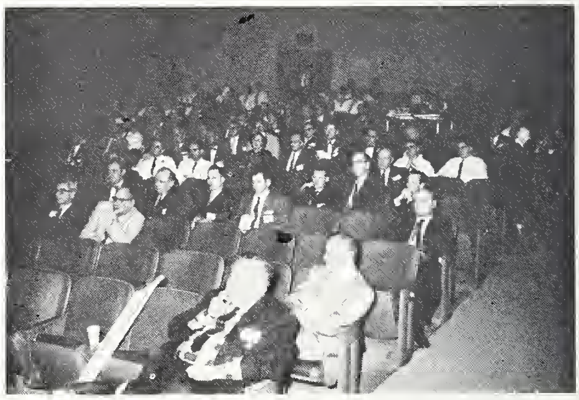
In addition to speakers from the University of Missouri Medical School faculty the program presented an outstanding guest faculty as follows: Curtis H. Lohr, M.D., Chief of Casualty Service, St. Louis and St. Louis County Civil Defense Departments; Oscar P. Hampton, M.D., Assistant Professor of Orthopedics, Washington University, St. Louis; John A. Growdon, M.D., Chief of Staff, St. Joseph Hospital, Kansas City; Curtis Artz, M.D., Associate Professor of Surgery, University of Mississippi, Jackson, Mississippi; and Carroll Hungate, M.D., Chairman, Medical Health Committee, U. S. Civil Defense Council, Kansas City.

The guest faculty was composed of Drs. Lohr, Hampton, Growdon, Artz and Hungate.

The morning program consisted of a panel discussion on "Planning for the Care of Multiple Casualties" by Drs. Hampton, Hungate, Lohr and Growdon and a second panel discussion on "Chemical and Biological Warfare Irradiation Injuries" by Clement Brooke, M.D., Ardath Emmons, Ph.D., Frank Engley, Ph.D., of the University faculty, and Carroll Hungate, M.D., Kansas City.

The afternoon session presented the following discussions: "Life Saving Measures on Admission," John J. Modlin, M.D., Head of Department of Surgery, Missouri University Medical School; "The Initial Care of Burns," Curtis Artz, M.D., Jackson, Mississippi; and "The Care of Wounds," Oscar P. Hampton, M.D., St. Louis. This entire program was presented in such a way that questions from the audience were received and answered adding to the practical value of the program. This presentation was acceptable for six hours of Category I Credit by the American Academy of General Practice. The program was developed under the auspices of the Postgraduate Committee of the University of Missouri Medical School in cooperation with the Civil Defense Medical Disaster Care Committee of the Missouri State Medical Association, Carl D. Siegel, M.D., Sedalia, chairman. It is hoped that programs of this nature may be held at specified times in other locations over Missouri so that as many physicians as possible in this state have an opportunity to hear these im-

Panelists on biological and chemical warfare were Drs. Hungate, Engley, Brooke and Emmons.



The entire meeting was well attended.

portant discussions pertaining to "Multiple Injuries."

It is felt by the State Association Committee on Civil Defense Medical Disaster Care that the medical aspects of the care of mass casualties are a vital concern to all members of the medical profession at this uncertain moment in history.

A number of physicians attending this April 6 conference added to their fund of knowledge by also attending on the preceding day, April 5, at the medical center "A Conference on Ontogenetic Nutrition," sponsored by the Department of Pediatrics at the University of Missouri Medical School with assistance from the National Vitamin Foundation.

The Second Annual M.D. Day Program will be held at the University of Missouri Medical Center, Columbia, October 27 and 28, 1961. The program will include postgraduate educational activities on Friday, October 27 and the morning of Saturday, October 28, and conclude with a buffet luncheon on the 28th at the Medical Center which will allow participants ample time to attend the Missouri-Nebraska football game in the afternoon.

A limited number of hotel rooms are available at this time and may be reserved by writing to: Executive Director, Postgraduate Medical Education, M-176, University Medical Center, University of Missouri, Columbia, Mo. Secure football tickets by writing to: Athletic Ticket Office, 125 Rothwell, University of Missouri, Columbia, Mo. Single tickets cost $4.25 which includes mailing costs.

Predictions are that MU football this fall will more than provide value received in thrills and victories to all "Tiger fans."

DR. VOHS HONORED

On the occasion of the 25th anniversary of the establishment of the St. Louis Group Hospital Service, Inc., of St. Louis, a certificate of appreciation was presented to Carl F. Vohs, M.D., St. Louis. Dr. Vohs was Chairman of the Committee on Medical Economics of the Missouri State Medical Association for many years and was President of the Association in 1957.

Carl F. Vohs, M.D.

The Certificate of Appreciation reads: This Certificate is presented to Carl F. Vohs, M.D., on the occasion of the twenty-fifth anniversary of the founding of the St. Louis Blue Cross Plan, April 18, 1936, on behalf of the more than two and one half million patients who have received the benefits of modern medical science through membership in Blue Cross; in appreciation of his vision and leadership as chairman of the Economics Committee of the St. Louis Medical Society which led to the establishment in St. Louis of the first not-for-profit community prepayment hospital service plan in Missouri; and for his years of devoted service as an officer and member of the Board of Trustees of Group Hospital Service, Inc., of St. Louis, Missouri. Done at the City of St. Louis, Missouri, this eighteenth day of April, 1961.

The certificate was signed by the chairman of the board and the president of Group Hospital Service, Inc., of St. Louis.

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In patients with edema induced by the earlier corticosteroids or from other causes, diuresis and sodium loss often occurs with triamcinolone. (Fernandez-Herlihy, L.: *M. Clin. North America* 44:509 [Mar.] 1960.)

SPECIAL PROBLEM: APPETITE STIMULATION AND WEIGHT GAIN

In contrast to the heightened craving for food sometimes seen with other corticosteroid compounds, appetite was unaffected by triamcinolone. (Cahn, M. M., and Levy, E. J.: *Am. Pract. & Digest Treat.* 10:993 [June] 1959.)

SPECIAL PROBLEM: HYPERTENSION

When ARISTOCORT was given to patients with dermatologic disorders for long periods, there were no significant changes in blood pressure. (Kanof, N. B.; Blau, S.; Fleischmajer, R., and Meister, B.: *A.M.A. Arch. Dermat.* 79:631 [June] 1959.)

SPECIAL PROBLEM: PSYCHIC STIMULATION AND INSOMNIA

Ideally, corticosteroid therapy ought not to add to the psychic component in dermatologic disorders, nor induce insomnia which will intensify the patient's itching and irritation. ARISTOCORT Triamcinolone has been singled out for its remarkably low incidence of psychic irritation and insomnia. (McGavack, T. H.: *Nebraska M. J.* 44:377 [Aug.] 1959; Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

SPECIAL PROBLEM: SEVERE CARDIAC DISEASE

Elderly patients with pulmonary emphysema due to impending heart failure who required corticosteroid therapy showed that triamcinolone could be employed with benefit and relative safety. (McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 [Dec.] 1958.)

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of allergic and inflammatory dermatoses, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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News—Personal and Professional

Guest speaker at a meeting of the New Jersey Chapter of the American College of Surgeons on April 14 was **Durward G. Hall**, M.D., Springfield, Member of Congress from the Missouri 7th District.

St. Louis area alumni of the University of Notre Dame at a meeting on April 19 presented their annual Man of the Year Award to **Bernard D. Coughlin**, M.D., St. Louis.

The Missouri Senate has confirmed the appointment by the Governor of **Robert B. Bassett**, M.D., St. Louis, and **Arthur D. Markel**, M.D., Poplar Bluff, as members of the State Hospital Advisory Council of the Division of Health of Missouri.

The Catholic Community Service of Kansas City at an open house on March 23 honored **E. F. Ellis**, M.D., Kansas City, as one of six civic and welfare leaders.

"The Use of Medication in Child Guidance Clinics" was the subject of a panel discussion at a meeting of the American Orthopsychiatric Association in New York in March which was moderated by **George J. Lytton**, M.D., Kansas City.

At a first anniversary celebration of Malcolm A. Bliss Mental Health Center Auxiliary held May 3 in St. Louis, the speaker was **George A. Ulett**, M.D., St. Louis.

Scheduled to speak at the 1961 scientific session of the American Cancer Society to be held in New York City October 23 and 24 is **Eugene M. Bricker**, M.D., St. Louis. His subject will be "Role of Radical Surgery" in a symposium on "Care of the Advanced Cancer Patient."

Recently elected president of the medical staff of Jewish Hospital, St. Louis, is **M. Norman Orgel**, M.D., St. Louis. Other officers elected were **Morris Abrams**, M.D., vice president; **Robert S. Karsh**, M.D., secretary, and **Robert Burstein**, M.D., treasurer.

Early in April **Hugh E. Stephenson**, M.D., Columbia, spoke before the Clinical Society of New York Polyclinic Medical School and Hospital, New York. His subject was "An Evaluation of New Methods of Cardiac Resuscitation."

Employees and medical staff members of the Dunklin County Memorial Hospital, Kennett, honored **Paul Baldwin**, M.D., Kennett, at a special ceremony at the hospital late in March. An oil painting of Dr. Baldwin was mounted in the hospital lobby at the ceremony.

Mental health was discussed by **Louis Belinson**, M.D., Jefferson City, at a meeting of the Mark Twain Parent-Teacher Association at Sedalia in late March.

The Missouri Athletic Club, St. Louis, recently elected **Armand D. Fries**, M.D., St. Louis, as president.

Among members recently reappointed by the Governor to the Cancer Commission are **John J. Modlin**, M.D., Columbia; **J. G. Probstein**, M.D., St. Louis, and **A. E. Spelman**, M.D., Smithville.

Among those receiving the Kansas City Ford Citizen of the Year awards was **Carroll P. Hungate**, M.D., Kansas City.

Among speakers at the Illinois State Medical Society annual meeting held in Chicago in May was **James G. Janney**, M.D., St. Louis.

"X-Ray Diagnosis of Injuries of the Cervical Spine" was the subject of a talk given by **Don C. Weir**, M.D., St. Louis, on March 18 at the

University of Minnesota Medical School Center of Continuation Study.

A program on "The Older Patient" will be presented at the Neurological Hospital, Kansas City, at 2:30 p.m. on July 30. Speakers will be Philip B. Reed, M.D., Indianapolis, and Drs. **G. Wilse Robinson, M. B. Pettis** and **Abraham Gelperin**, Kansas City.

The St. Louis Orthopedic Society recently elected **Ralph K. Earp**, M.D., St. Louis, as president. **Vilray P. Blair**, M.D., St. Louis, was elected vice president, and **George E. Sheer**, M.D., St. Louis, was elected secretary-treasurer.

Among speakers at the South Western Surgical Congress held in St. Louis in April were **R. W. Steubner**, M.D., St. Louis, who spoke on "The Case Against Surgical Stripping and Excision for Varicose Veins of the Lower Extremities," and **Terry E. Lilly, Jr.**, M.D., Kansas City, who spoke on "Transverse Incisional Herniorrhaphy."

The American Association of Psychiatric Clinics for Children appointed **George J. Lytton**, M.D., Kansas City, as membership chairman at a recent meeting in New York.

NEW MEMBERS

John T. Dolan, Jr., M.D., 1517 Kenilworth Drive, St. Louis, has become a member of the St. Louis Medical Society. Dr. Dolan is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1954.

A. L. Falkner, M.D., Warrensburg Medical Center, Warrensburg, has become a member of the Johnson County Medical Society. Dr. Falkner is a native of Kansas, received his preliminary education in Missouri, and his M.D. degree from the University of Kansas in 1956.

Charles C. Gullett, M.D., 10 Richards Road, Kansas City, has become a member of the Jackson County Medical Society. Dr. Gullett is a native of Ohio, received his preliminary education in Indiana, and his M.D. degree from Indiana University in 1947.

Herman J. Hausheer, M.D., 1804 S. Dodgion St., Independence, has become a member of the Jackson County Medical Society. Dr. Hausheer is a native of South Dakota, received his preliminary education in Missouri and his M.D. degree from the University of Iowa in 1954.

Robert F. Meger, M.D., 8639 Eulalie Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Meger is a native of Illinois, received his preliminary education in Illinois, and his M.D. degree from Washington University School of Medicine in 1958.

William R. Morris, M.D., 9406 E. 63rd St., Raytown, has become a member of Jackson County Medical Society. Dr. Morris is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri in 1946.

Edwin C. Neville, M.D., 1325 South Grand Blvd., St. Louis, has become a member of the St. Louis Medical Society. Dr. Neville is a native of Ohio, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine in 1951.

Orval E. Riggs, M.D., 217 Oak St., Poplar Bluff, has become a member of the Butler-Ripley-Wayne County Medical Society. Dr. Riggs is a native of Arkansas, received his preliminary education in Arkansas, and his M.D. degree from the University of Arkansas Medical School in 1953.

Daniel Roth, M.D., 1087 North Hanley Road, St. Louis, has become a member of St. Louis County Medical Society. Dr. Roth is a native of Illinois, received his preliminary education in Missouri, and his M.D. degree from Chicago Medical School in 1945.

Sidney Saltzstein, M.D., 1460 Oriole Place, St. Louis, has become a member of St. Louis County Medical Society. Dr. Saltzstein is a native of Wisconsin, received his preliminary education in Connecticut, and his M.D. degree from Johns Hopkins University School of Medicine in 1954.

Herbert Sunshine, M.D., 6342 San Bonita Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Sunshine is a native of New York, received his preliminary education in New York and St. Louis, and his M.D. degree from Washington University School of Medicine in 1954.

George P. Williams, M.D., 10604 Blue Ridge Ext., Kansas City, has become a member of the Jackson County Medical Society. Dr. Williams is a native of Missouri, received his preliminary education in Missouri and his M.D. degree from the University of Iowa in 1956.

County Society News

FIRST DISTRICT

JOSEPH L. FISHER, ST. JOSEPH, COUNCILOR

Buchanan County Medical Society

Forty St. Joseph and Northwest Missouri doctors attended the April 5 meeting of the Buchanan County Medical Society in the Empire Room of Hotel Robidoux in St. Joseph. The speaker was Dr. Charles E. Lockhart, Springfield, surgeon, who gave an excellent paper and showed numerous slides on "Management of Lesions of the Breasts." Dr. Lockhart spoke under the auspices of the Missouri Division, American Cancer Society, as part of their profession education program during April, Cancer Control Month.

The speaker was introduced by Dr. Joseph L. Fisher. At the business meeting, prior to the scientific program, the society gave unanimous endorsement to a $9,605,000 sewer treatment plant and extension program which was to be voted on in St. Joseph, April 11.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

On Thursday, April 13, the regular dinner meeting of the Grand River Medical Society and Auxiliary was held at the Strand Hotel in Chillicothe.

Mrs. Jack Vinyard was program chairman for the Auxiliary and presented Mr. J. R. Anderson of Carrollton who took the ladies on a "slide" tour of the Orient. Some of the doctors who had to wait after the completion of their own meeting for their wives to come out of the interesting "slide" show chose to call the tour a slow boat to China.

Dr. R. W. Augustine of St. Joseph spoke to the doctors about "Congenital and Developmental Aberrations of the Lower Extremities." He discussed, in particular, club foot, tibial torsion and low arches. He stressed the overtreatment of flat feet and other deformities and the futility of arch supports and special shoes in many instances.

Dr. Clark, President, mentioned for the benefit of the uninformed that Dr. Donald Dowell of Chillicothe, and of the Grand River Medical Society, was now President-Elect of the Missouri State Medical Association. Dr. Robert Smith was commended in absentia for his forthright nominating speech and all hoped he would recover in time to be at the next meeting.

The ladies of the Auxiliary were lauded for their splendid turnout at the State Meeting.

A financial report showed that the hospitality room fund came out with a balance of thirty dollars, possibly because many of the guests failed to use cream and sugar in their coffee. Announcement was made of the open house to be held at the new Carrollton Hospital and at the home of Dr. John Platz. All members were urged to attend.

It was decided to hold the annual golf tournament July 8 at the Chillicothe Country Club, the golf to be followed by the regular evening dinner meeting. It was announced that arrangements had been made for Dean Wilson of the University of Missouri to speak, thus insuring one of the best meetings of the year.

Guests present in addition to the speakers were Mrs. Augustine, Mr. Hugh Evans, Administrator of the Chillicothe Hospital, and representatives of Robins, Neisler and Pitman Moore Drug Companies.

Frank R. Daley, M.D., *Secretary*

SECOND DISTRICT

A. P. ROWLETTE, MOBERLY, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society held its monthly dinner meeting on April 13 at the Woodland Hospital in Moberly.

The scientific program for the evening was presented by Herbert C. Sweet, M.D., internist, St. Louis. He spoke on "Emphysema of the Lungs." He stressed the use of pulmonary function measurement as being of considerable help in the diagnosis of this disease. Included in the discussion of treatment were bronchodilator drugs, antibiotics and the positive pressure breathing apparatus.

Dr. Sweet made the interesting observation that approximately 95 per cent of patients with severe emphysema are smokers and that nine out of 10 of these are men.

J. W. Fleming, M.D., *Secretary*

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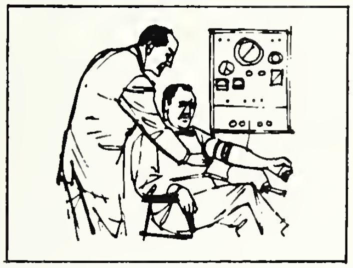

FOR ADVANCE REGISTRATION OF PHYSICIANS

Please return this coupon to the Circulation and Records Department of the American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois before June 9, 1961. Your advance registration card will be sent to you on June 14 unless you request an earlier mailing date.

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Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society held their regular April meeting on Tuesday night, April 18, at the Moose Lodge in Hannibal. The evening festivities began with a social hour followed by dinner and then a most interesting program on "Recent Advances in the Treatment of Hypertension." The subject was ably covered by James G. Janney, M.D., and Manfred Thurman, M.D., St. Louis.

This program was jointly sponsored by the Cardiovascular Section of St. Louis University Medical School and the Missouri Academy of General Practice. Twenty-one physicians were present for this interesting program and considerable audience participation in the general discussion of the subject was evidence of the good reception of the program.

Wyeth Hamlin, M.D., *Secretary*

FOURTH DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

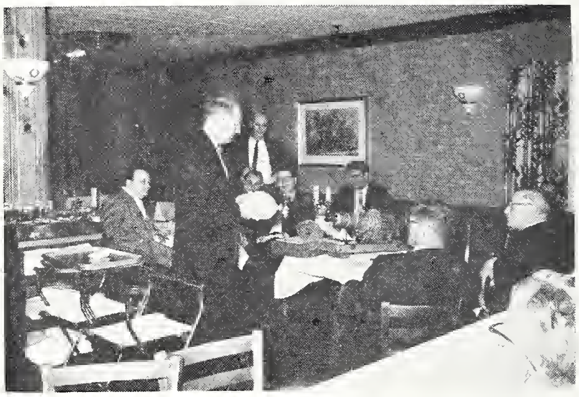
Lincoln-St. Charles County Medical Society

The Lincoln-St. Charles County Medical Society held a dinner meeting at the Southern Air at Wentzville on Tuesday evening, April 25. Following the social hour and dinner, the 17 physicians present were privileged to hear an excellent discussion on "Emergencies in the Newborn Infant" presented by M. R. Behrer, M.D., St. Louis, from the Department of Pediatrics, Washington University Medical School. Following the scientific presentation a short business session was held.

Dr. Behrer was the speaker.

Dr. G. A. Yeager was accepted into membership by transfer from St. Louis Medical Society.

It was voted to hold monthly meetings of the Society on the fourth Tuesday night of each month. It was felt that having a definite meeting time would enhance attendance in making it possible for members to plan ahead for their attendance. The next meeting of the Society will be at Troy, in the Lincoln County Memorial Hospital, on Tuesday night, May 23.



The speaker demonstrated his discussion.

Guests present were M. S. Wepprich, M.D., and S. C. Bonney, M.D., Washington, and Ray McIntyre, Field Secretary of the Missouri State Medical Association.

V. P. Muenster, M.D., *Secretary*

FIFTH DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

Louis T. Byars, M.D., of St. Louis, Associate Professor of Clinical Surgery at Washington University School of Medicine, spoke before a joint meeting of the Audrain, Callaway and Montgomery County Medical Societies, on Tuesday night, April 18, at the Country Club in Mexico.

Dr. Byars spoke on "Some Problems Encountered in Plastic Surgery." The evening festivities began with a social hour followed by dinner and then the excellent presentation by Dr. Byars.

Gordon Shaw, M.D., *Secretary*

SIXTH DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The regular monthly meeting of the West Central Missouri Medical Society was held in

Butler, at the Inn Hotel, April 13. The usual social hour preceded the dinner and scientific meeting with the social get together giving doctors and their wives some opportunity to pass the hour of day and listen to something other than shop talk.

The President of the society, Bob Magee of Eldorado Springs, presented the speaker of the evening, Dr. Cecil Kohn, an internist in Kansas City specializing in allergy, who brought an interesting discussion on this subject; particularly upon the more recent depository vaccine, or desensitizing medicum, which is used now preseasonally with just one or two shots for the season rather than having to go through that long gamet of shots of increasing doses of the allergen material as was used in the past. The speaker presented the subject much to the pleasure of those present and following this presentation many questions were asked. A good talk can, in many instances, be measured by the amount of questions and discussions brought forth from the audience.

Following the scientific program the President opened the business portion of the program. The minutes of the last meeting were read by the secretary. Some items were brought up for discussion, one being the matter of some prescription filling by some plan in the state whereby people could join a group and have prescriptions filled on a club basis. It was the opinion of those present that this matter was entirely a matter of the person and his druggist as long as it was filled as written.

Those present were: Drs. O. B. Barger, Councilor, Edward Jones, H. A. Tracy and wife, A. W. Eklund, Jack Moody and wife, M. O. Hartwell and wife, Don Geisler, Robert Brownsberger and wife, F. L. Martin and wife, L. P. McCann, James Pascoe, Robert Magee and wife, C. W. Luter and wife, C. A. Lusk, Jr., and our guests, Dr. and Mrs. Cecil Kohn of Kansas City.

The next meeting will be held in Harrisonville on May 18. The date was postponed a week so that those of us who wished could attend the meeting in Columbia, the 11th and 12th of May, the spring symposium held at the University of Missouri Medical Center on a fine and timely subject of "Steroid Therapy." The medical center is expected to play a great part in Missouri medicine in the future, and will be able to furnish more fine programs and panel discussions when they get their postgraduate program fully developed.

No further business, the meeting adjourned until the third Thursday in May.

Carter W. Luter, M.D., *Secretary*

EIGHTH DISTRICT

DOYLE McCRAW, BOLIVAR, COUNCILOR

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held Friday, March 24, 6:30 p.m., at Calli's Half-A-Hill with 47 members and one guest present. Stanley S. Peterson, M.D., president-elect, presided in the absence of the president, Dr. Ferguson. Upon motion by Dr. Anthony, seconded by Dr. Morton, the minutes of the February meeting were approved as published in the *Bulletin*.

Dr. Peterson announced that the Sixth Annual Ozark Empire Cancer Conference will be held Friday, April 28, and will replace the regular monthly meeting of the Society. He announced that the meeting will begin with a luncheon, include an afternoon session, a dinner meeting with a panel presentation that evening, and he urged all members of the Society to support this most important event which will feature a panel of specialists from the National Cancer Institute at Bethesda, Maryland.

It was announced that the Greene County Dental Society has asked the members of the Greene County Medical Society to be their guests on Wednesday, April 19, at 7:00 p.m. at the Kentwood Arms Hotel at which time Dr. William G. Shafer, Professor of Oral Pathology for both the Indiana School of Dentistry and the Indiana School of Medicine, will be the guest speaker and he will discuss "Oral Lesions and Treatment."

It was announced that the Greene County Bar Association has invited the members of the Society to be their guests May 26 at Holiday Inn for the annual Doctor-Lawyer meeting. Upon motion by Dr. Lemmon, seconded by Dr. Silsby, the Society approved waiving the regular meeting of the Society for May in view of this meeting.

Dr. H'Doubler, the secretary, read a letter from the Greene County Medical Society Auxiliary which reported that in lieu of other observances of Doctor Day, March 30, the Women's Auxiliary has made a contribution in honor of the members of this Society to the American Medical Education Foundation.

The program for the evening consisting of the report of the Greene County Delegates to the Annual Session of the Missouri State Medical Association was then presented with Drs. Kenneth E. Knabb, F. T. H'Doubler, Jr., and Stanley S. Peterson presenting the highlights of the scientific and medical economic aspects of the meeting. It was reported that the intent of the Greene County Medical Society resolutions on payment of physicians for governmental medical programs and on implementation of the Kerr-Mills Law had been passed by the House of Delegates.

It was then announced that through the courtesy of Mr. Pearson Ward, of television station KTTS-TV, a kinescope of the Reuther-Annis Debate which had been broadcast on a CBS television network show "Face the Nation" would be shown.

Following the presentation of this show, and a period of discussion, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

NINTH DISTRCT

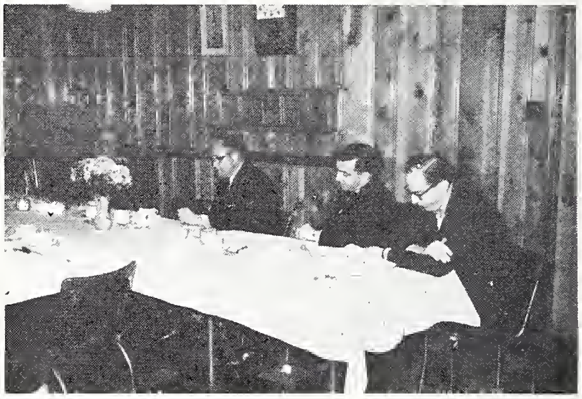
E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

The Mid-Missouri County Medical Society and the doctors' wives held a dinner meeting in the Pine Room, Greyhound Bus Station, Rolla, on Thursday night, April 27.

A short business meeting followed the scientific program.

The scientific program for the evening was a panel discussion on "Recent Advances in the Treatment of Hypertension," which was presented by the Cardiovascular Section of St. Louis University Medical School. The participants from the medical school presenting the discussion were Richard J. Dames, M.D., Instructor in Internal Medicine; Manfred Thurman, M.D., Fellow in Cardiology; and Kenneth Walter, M.D., Instructor in Internal Medicine.



St. Louis physicians presented a panel on hypertension.

M. K. Underwood, M.D., *Secretary*

TENTH DISTRICT

W. D. ENGLISH, CARDWELL, COUNCILOR

Mineral Area County Medical Society

Albert M. Huggins, M.D., Instructor in Internal Medicine, St. Louis University School of Medicine, spoke before a meeting of the Mineral Area County Medical Society in the Clinic Building of the State Hospital in Farmington on Thursday night, April 27. His subject of discussion was "Diuretics—Present Day Application."

Paul Dennis, M.D., *Secretary*

DEATHS

Martin, Charles E., M.D., Ferguson, a graduate of Washington University School of Medicine, 1937; member of St. Louis Medical Society; aged 49; died April 11.

Geraughty, Edward, M.D., Liberty, a graduate of University Medical College, Kansas City, 1903; member of Jackson County Medical Society; aged 82; died April 14.

Allen, Charles E., M.D., Kansas City, a graduate of the Kansas City Hahneman Medical College, 1904; member of Jackson County Medical Society; aged 85; died April 18.

!!!!!!

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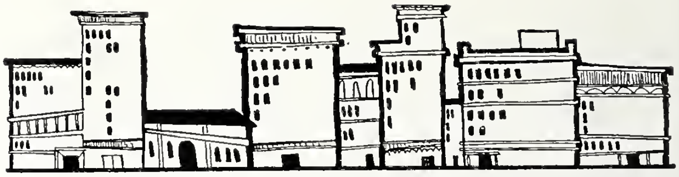
Based on recent findings, the modern Rx uses for wine—in convalescence, cardiology, urology, geriatrics—are discussed in "Uses of Wine in Medical Practice." Wine Advisory Board, 717 Market Street, San Francisco 3, California.

*Silverman, M.: 48th Quarterly Meeting, Soc. Medical Friends of Wine, Jan. 13, 1960

From the Medical Schools



ST. LOUIS UNIVERSITY

Lectures

Faculty members of St. Louis University presented fourteen papers at the 45th Annual Meeting of the Federation of American Societies for Experimental Biology at Atlantic City, New Jersey, April 10-14.

The Department of Biochemistry, under the direction of Dr. Edward A. Doisy, exhibited eight of the scientific abstracts. Participants and their subjects were: Dr. John T. Matschiner, assistant professor, and Dr. E. A. Doisy, Jr., professor, "The Hemorrhagenicity of Oxidized Lipids"; Carl B. Felger, graduate student, and Dr. Philip A. Katzman, professor, "Mono- and Diglucuronides of Estriol in Human Pregnancy Urine"; William R. Michael, graduate student, and Dr. William H. Elliott, professor, "Synthesis and Metabolism of Vitamin K_1-3′-Methyl-^{14}C"; Martin J. Sweeney, Jr., graduate student, and Dr. D. Ralph Strength, associate professor, "Metabolism of Derivatives of Hexahydrobenzoic Acid"; Lester W. Wells, graduate student, Paul D. Ray, graduate student, and Dr. S. A. Thayer, professor, "Metabolism of Cholanic-24-^{14}C Acid"; Dr. J. Wendell Davis, assistant professor, and Edsel T. Bucovaz, graduate student, "An Amino Acid Incorporating System Purified With Sephadex"; James W. Ahlberg, graduate student, Vincent A. Ziboh, graduate student, Robert C. Sonders, graduate student, and Dr. S. L. Hsia, assistant professor, "Metabolism of Chenodeoxycholic-24-^{14}C Acid in the Chicken"; Joseph D. Cherayil, graduate student, and Dr. Harold Van Kley, senior instructor, "Studies on the Arylsulfatase of Aspergillus Oryzae."

The Department of Pharmacology, directed by Dr. Elijah Adams, presented two papers. Participants and their subjects were: Dr. John C. Loper, instructor, and Dr. Elijah Adams, professor, "Purification of Histidinol Dehydrogenase from Salmonella"; Dr. Audrey Stevens, instructor, "Incorporation of Ribonucleotides Into RNA."

The Department of Physiology, under the direction of Dr. Alrick B. Hertzman, presented two abstracts. Participants and their subjects were: Dr. Pietro O. Bramante, assistant professor, and Dr. A. K. Ray, research associate, "Basal Metabolic Rate of the Golden Hamster"; Dr. Leo C. Senay, Jr., assistant professor, Leon D. Prokop, graduate student, Leslie Cronau, graduate student, and Dr. Alrick B. Hertzman, professor, "Relationship of Sweating, Skin Temperature and Cutaneous Blood Flow in the Calf and Forearm."

The Department of Surgery, directed by Dr. C. Rollins Hanlon, exhibited one paper. Participants and the subject were: Dr. Theodore Cooper, assistant professor, Dr. Vallee L. Willman, assistant professor, and Dr. C. Rollins Hanlon, professor, "Effects of Hyperthermia on Blood Volume and Total Peripheral Resistance."

The Department of Biology, under the direction of Dr. John D. Dwyer, presented one abstract. The subject presented by Dr. X. J. Musacchia, associate professor, was "Absorption and Active Transport of Sugar (D-Glucose) in Segments of Fish Intestine."

Trip Abroad

Dr. R. Walter Schlesinger, director of the department of microbiology at the St. Louis University School of Medicine, has been awarded a Senior Visiting Fellowship for 11 weeks of study abroad by the Organization for European Economic Cooperation through the National Science Foundation.

Dr. Schlesinger will join Dr. Werner Schaefer, director of the Max Planck-Institut for Virusforschung at Tubingen in Western Germany on May 15. They will work on the basic aspects of virus multiplication in cultured human cells, particularly with dengue and yellow fever viruses.

Miss Irene Schulze, a graduate student at St. Louis University who holds a National Institutes of Health traineeship in microbiology will collaborate with Drs. Schlesinger and Schaefer in the research.

Dr. Schaefer, well known virologist, is noted for his work on intracellular synthesis of building blocks of viruses, especially the separate synthesis of the nucleic acid which is the genetic material of the virus and the protein coat material which probably mediates the infection of cells by the virus.

Dr. Schlesinger has worked on dengue virus since World War II, when he and Dr. Albert Sabin developed the first experimental vaccine

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ANOTHER YEAR OF SYMPOSIA . . .

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Sunday, June 11, 1961
Richardson's Mineral Springs

SPRINGFIELD, MASSACHUSETTS
Wednesday, June 14, 1961
The Schine Inn

CHEYENNE, WYOMING
Monday, July 24, 1961
The Plains Hotel

McALESTER, OKLAHOMA
Saturday, July 29, 1961
The Aldridge Hotel

SEATTLE, WASHINGTON
Saturday, August 5, 1961
The Olympic Hotel

KANSAS CITY, KANSAS
Friday, September 15, 1961
Battenfeld Memorial Auditorium

TOLEDO, OHIO
Thursday, September 28, 1961
The Commodore Perry Hotel

WICHITA, KANSAS
Wednesday, October 4, 1961
The Broadview Hotel

TRAVERSE CITY, MICHIGAN
Friday, October 13, 1961
The Park Place Hotel

PEORIA, ILLINOIS
Thursday, October 26, 1961
The Hotel Pere Marquette

PROVIDENCE, RHODE ISLAND
Wednesday, November 1, 1961
The Colony Motor Hotel

HARRISBURG, PENNSYLVANIA
Thursday, November 9, 1961
The Penn Harris Hotel

JACKSONVILLE, FLORIDA
Sunday, November 12, 1961
The Robert Meyer Hotel

ALLENTOWN, PENNSYLVANIA
Wednesday, November 15, 1961
The Americas Hotel

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for the prevention of the disease. Since that time, Dr. Schlesinger and his associates have studied different types of dengue virus in the laboratory using them as representative models for a large group of mosquito-transmitted human virus diseases.

For the last several months Dr. Schlesinger and Miss Schulze have been able to grow these viruses in cultured human cells and to develop a method whereby they can be measured quantitatively and accurately for their infectious potency. The method also permits the isolation of virus populations which are the progeny of single virus particles.

Using this technic, it will now be possible to study genetic relationship between dengue, yellow fever, St. Louis encephalitis and many other viruses making up a large group of important agents of human diseases. The purpose of the work to be carried out by Miss Schulze and Dr. Schlesinger in Germany is to learn more about the manner in which these agents bring about infection and death of human cells.

Upon completion of his research studies at Tubingen, Dr. Schlesinger will visit virology laboratories in Switzerland, France, Denmark and England. Dr. Schlesinger's wife and two children will accompany him abroad.

He is a member of the Virology and Rickettsiology Study Section of the National Institutes of Health and Chairman, Division of Virology, Society of American Bacteriologists.

Grants

New grants totaling $60,279 for a three year period of research study have been awarded to two biochemists at the St. Louis University School of Medicine by the United States Public Health Service.

Dr. J. Wendell Davis, assistant professor of biochemistry, has been awarded a three year grant totaling $28,885 for studies into the biosynthesis of proteins. Dr. Davis will investigate the incorporation of radioactive amino acids into proteins of the lactating mammary gland of rats.

Dr. D. Ralph Strength, associate professor of biochemistry, has been awarded a grant for a three year period totaling $31,394 for studies of the interrelation of methylated nitrogenous compounds of tissues.

This study centered upon the nitrogenous compounds which occur in the free state in specialized organs and tissues and those which occur in a bound form in phospholipids. Greater knowledge of the origin and metabolism of these compounds may lead to an understanding of their function.

Guest Lecturer

Dr. Ilza Veith, associate professor of the history of medicine, University of Chicago, delivered the annual Albert Kuntz lecture sponsored by the Phi Chi medical fraternity April 27. Dr. Veith spoke on "The Medicine of India and Its Science of Life." From 1947, until it became the National Medical Library, Dr. Veith was consultant in Far Eastern Medicine to the Armed Forces Medical Library, and since 1949, has been on the faculty of the University of Chicago. She received her M.A. and Ph.D. degrees on the history of medicine from Johns Hopkins University. The lecture honored Dr. Kuntz, an international authority on the autonomic nervous system, who died in 1957. He was the director of the department of anatomy and a member of the medical faculty for 44 years.

WASHINGTON UNIVERSITY

Meetings, Lectures

Washington University Medical Society presented a symposium on "The Ground Substance: Biological and Clinical Significance" at a recent meeting with Dr. William H. Daughaday, Department of Medicine, as moderator. Symposium participants and their topics were: Dr. Edward W. Dempsey, Department of Anatomy, "Morphologic Background"; Dr. Luis Glaser, Department of Biochemistry, "Biosynthesis: Hyaluronic Acid"; Dr. Jack L. Strominger, Department of Pharmacology, "Biosynthesis: Sulfated Mucopolysaccharides"; Dr. John Esben Kirk, Department of Medicine, Division of Gerontology, "Arterial Wall Mucopolysaccharide"; Dr. David H. Brown, Department of Biochemistry, "Mucopolysaccharide Abnormalities in Gargoylism."

Dr. Paul E. Lacy, assistant dean and assistant professor of pathology at Washington University, delivered the annual Alpha Omega Alpha lecture in April at the Medical School. He discussed "Morphologic and Histochemical Studies on the Islets of Langerhans."

The Fourth Annual Philip A. Shaffer Lecture was given at the medical center in March by Dr. Heinz Fraenkel-Conrat, professor of virology at the University of California, Berkeley. Dr. Fraenkel-Conrat's title was "Recent Studies on the Chemical Nature of Viral RNA."

In May, Dr. Michael E. DeBakey, professor and chairman of the department of surgery at

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Baylor University College of Medicine, delivered the 26th annual Leo Loeb Lecture. He discussed clinical patterns of occlusive vascular disease and their surgical significance.

Dr. Hugh Chaplin, assistant professor of medicine and associate dean of Washington University School of Medicine, delivered the annual John G. Gibson Lecture in May at Presbyterian Hospital, New York City. He discussed "Transfusion Reactions: Their Evaluation and Implications."

Dr. Wilhelm S. Feldberg of the National Institute for Medical Research, London, delivered the Evarts A. Graham Memorial Lectures in May. During the three-day lecture series, Dr. Feldberg discussed a pharmacological approach to the brain from its inner and outer surface and mediators of allergic reactions. The Evarts Graham Lecture Series honors the late Dr. Evarts A. Graham, who was Bixby professor and head of the department of surgery at Washington University School of Medicine from 1919 until his retirement in 1951.

Original scientific research conducted by 10 students at the Medical School was presented at the annual senior research program in April. Research by the 10 presenting students was selected from more than 50 investigations conducted in addition to the regular medical school curriculum, by members of the senior class. Students presenting and their research were: William G. Juergens, Jr., Chester, Ill., "Chemical Basis for the Immunological Specificity of a Strain of Staphylococcus Aureus"; Azmi Khazin, Nazareth, Israel, "Thyroid Regulatory Function of Intra-Ocular Pituitary Transplants"; Nicholas T. Kouchoukos, Grand Rapids, Mich., "Effects of Extracorporeal Circulation on the Digitalis Levels and State of Digitalization of the Dog: Observations on the Metabolism of Tritium-Labeled Digoxin"; Charles R. Lewis, Panonia, Colo., "The Present Effect of Penicillin on Experimental Gangrenous Appendicitis"; Joseph T. McNamara, Northridge, Calif., "Ultrastructure of Experimental Polycystic Renal Disease in Rats"; Alan Pearlman, Des Moines, Ia., "A Cortical Potential of Long Duration: Its Relation to the Excitability of Rabbit Visual Cortex"; David M. Reisler, Tucson, Ariz., "Effect of Cortisone Treatment on Muscle Cell Membrane Permeability to Carbohydrate *in Vitro*"; Robert C. Simon, Arlington, Mass., "The Circulating Foam Cell"; William T. Theime, Wallingford, Pa., "Ergothioneine Metabolism: Demonstration of an Intracellular System for the Reduction of Oxidized Ergothioneine."

UNIVERSITY OF MISSOURI

Meetings

The Ontogenetic Nutrition Conference, sponsored by the departments of biochemistry and pediatrics, and the University of Missouri Division of Extension in cooperation with the National Vitamin Foundation, was held at the Medical Center in the auditorium, April 5, 1961, from 12:30 p.m. to 9:45 p.m.

Guest speakers were: Robt. W. Hillman, M.D., associate professor of Environmental Medicine and Community Health, New York University College of Medicine, speaking on "Foetal Nutrition (Nutrition in Pregnancy)"; Harold M. Nitowsky, M.D., assistant professor of pediatrics, Johns Hopkins School of Medicine, speaking on "Infant Nutrition: Premature and Normal Born"; David B. Coursin, M.D., chief of pediatrics and director of research, St. Joseph Hospital, Lancaster, Penn., speaking on "Nutrition in Adolescence"; Robert Goodhart, M.D., scientific director, The National Vitamin Foundation, presenting the afternoon introduction; John F. Mueller, M.D., associate professor of nutrition, Cincinnati General Hospital, speaking on "Adult Nutrition." Dr. Hillman also spoke on "Geriatric Nutrition" in the evening session.

Participating members of the University of Missouri Medical Center staff were: Dr. Vernon E. Wilson, dean and director, who welcomed the group; Dr. Thomas D. Luckey, professor and chairman of the department of biochemistry, who gave an introduction; and Dr. Robert M. Jackson, professor and chairman of the department of pediatrics, speaking on "Child Nutrition."

A Symposium on "The Early Care of Multiple Injuries" sponsored by the University of Missouri School of Medicine, and Continuing Education Service, in cooperation with the Civil Defense Committee of the Missouri Medical Education for National Defense, was held April 6, 1961, in the auditorium of the Medical Center.

Guest faculty included: Curtis Artz, M.D., associate professor of surgery, University of Mississippi; John A. Growdon, M.D., chief of staff, St. Joseph Hospital, Kansas City, Mo.; Oscar Hampton, M.D., assistant professor of orthopedics, Washington University; Carroll Hungate, M.D., chairman, Medical Health Committee, United States Civil Defense Council; and Curtis Lohr, M.D., Chief of Casualty Service, St. Louis and St. Louis County Civil Defense Departments.

Participants from the University of Missouri faculty were: Vernon E. Wilson, M.D., dean and

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director, Medical Center; Carl H. Almond, M.D., professor of surgery; Clement Brook, M.D., associate professor of pediatrics; Ardath Emmons, Ph.D., associate professor of chemical engineering, Director, Research Reactor Facility; Frank Engley, Ph.D., professor and chairman, department of microbiology; John H. Landor, M.D., assistant professor of surgery; John Modlin, M.D., professor and chairman, department of surgery.

The department of obstetrics and gynecology sponsored an afternoon Symposium on Obstetrics and Gynecology, May 4, 1961, in the Medical Center Auditorium. Dr. John M. Nokes, department of obstetrics and gynecology, University of Virginia School of Medicine was guest speaker. Dr. Nokes also delivered the first in a series of Jacob S. Roden Memorial Lectures at the Medical Center Auditorium on the evening of May 4, 1961, at 8 p.m.

In recognition of "Missouri State Student Nurse Week," March 5 through 11, the faculty of the School of Nursing gave a coffee honoring the student nurses Thursday, March 9, in the Medical Sciences Lounge. Coffee and cookies were served to approximately 450 guests.

Visitors

Dr. Aaron Bendich, of the Sloan Kettering Institute for Cancer Research, was a guest speaker for the Biochemistry Department on March 22, 1961, speaking on "Studies on the Biological Activity of Nucleic Acids."

Robert G. Kindred, M.D., orthopedic surgeon, University of Virginia, and former medical officer in charge of the "Tissue Bank," U. S. Naval Medical School, National Naval Medical Center, Bethesda, Maryland, visited the department of surgery on April 10 and 11. During his visit, Dr. Kindred gave a presentation covering the technics and problems of procurement, processing, preservation and banking of human tissues. Included was a 23 minute sound-color motion picture filmed under Dr. Kindred's direction at the U. S. Navy Medical Center, demonstrating the actual operation of the Bank.

Dr. Vernon Luck, Medical Director of the Orthopedic Hospital, Los Angeles, California, gave a talk to the staff and student body on March 24, 1961, sponsored by the department of surgery here.

During his talk on "The Traumatic Arthritides —A New Concept," Dr. Luck presented visual material illustrating the clinicopathologic development of traumatic arthritis. Dr. Luck was the recipient of the Citation of Merit from the University of Missouri School of Medicine Medical Alumni Organization at the meeting of the Missouri State Medical Association in Kansas City, on March 21. He is a former student of the School of Medicine.

Dr. Michael Bonfiglio, associate professor of orthopedics, State University of Iowa, was a guest of the department of surgery on March 24.

Dr. John E. Magielski of the department of otolaryngology, University of Michigan, spent April 10 and 11 visiting the department of surgery.

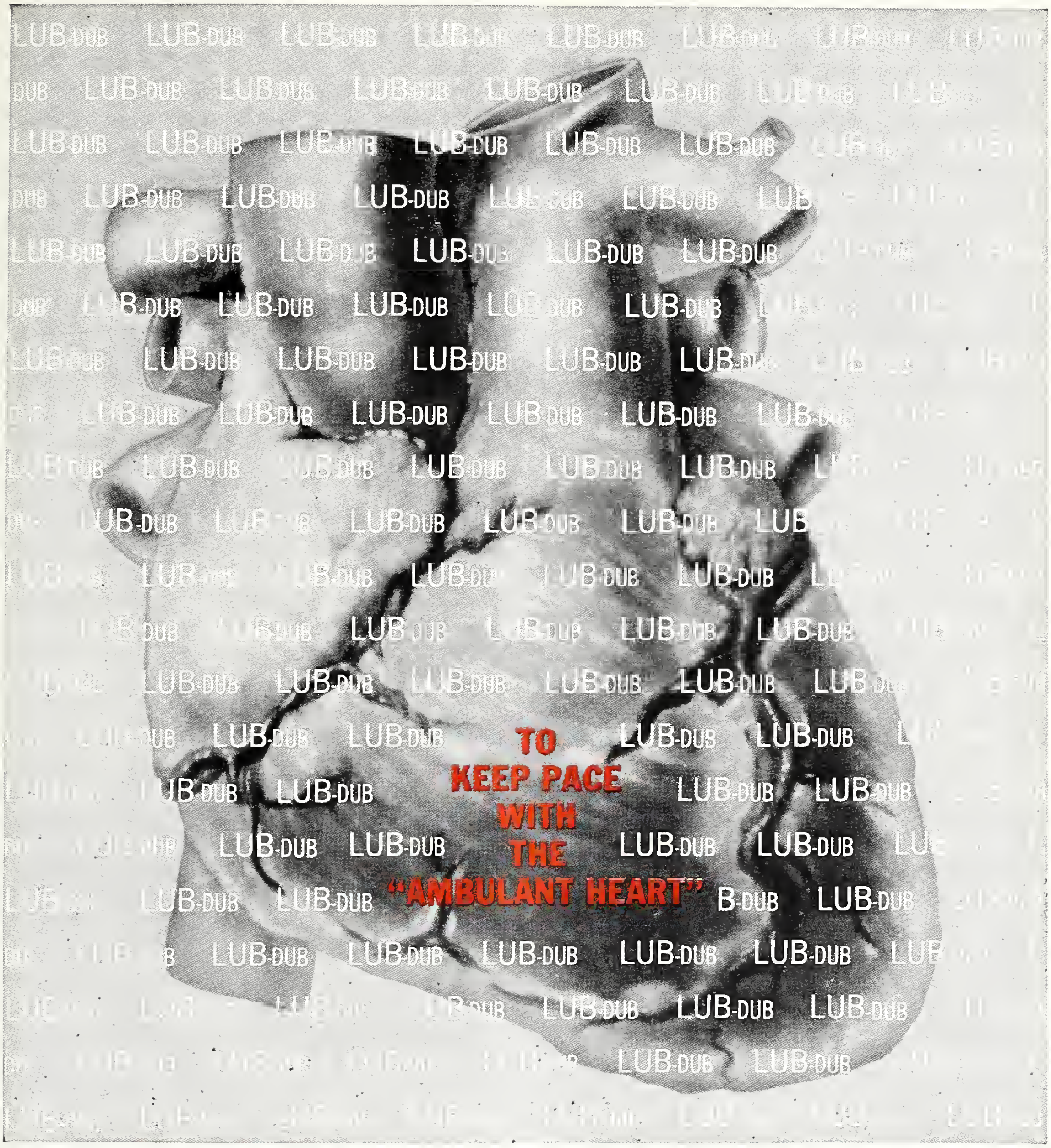
Dr. Frank W. Putnam, professor of biochemistry and head of the department at the University of Florida, on April 27 gave the third in a series of lectures on special topics in biochemistry presented at the Medical Center. Dr. Putnam lectured on "Structural Studies on Human Gamma Globulin." He also presented a microbiology seminar on "Immunological Studies on Gamma Globulin" April 28, at the Medical Center.

Dr. Wilfred F. White, biochemist with the Scientific Divisions of Abbott Laboratories, North Chicago, lectured on "Erythropoietin," at the second of a series of lectures on special topics in biochemistry presented at the Medical Center on April 20.

Miss Olga Heini, librarian at the university hospital in Zurich, visited the medical library on Friday, April 14. Miss Heini had been working at the Yale Medical Library since October, 1960, and is presently on a country-wide tour of medical libraries.

Gifts and Grants

A grant of $134,720 for a period of five years has been awarded to the University of Missouri by the Public Health Service of the United States Department of Health, Education and Welfare in support of training medical students in the department of psychiatry in the School of Medicine. The grant, under the direction of Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department,will allocate $26,944 to the University each year for five years beginning July 1, 1961. The program is officially entitled "Undergraduate Training Program in Psychiatry." Assisting Dr. Weiss with this program will be Drs. David Davis, Robert E. Froelich, and Philip J. Marco, assistant professors of psychiatry, and various clinical associates in the department of psychiatry. Award of this grant was recommended by the National Advisory Mental Health Council. The purpose of the grant is to support improvement and ex-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pansion of the undergraduate training program in psychiatry at the University.

New Appointments

Six new appointments have been approved by the University of Missouri Board of Curators for the School of Medicine professional staff. They are: David R. Ginder, M.D., now Director of Medical Education at St. Elizabeth Hospital in Youngstown, O., to be associate professor of medicine, effective April 15, 1961; George W. N. Eggers, M.D., now on the faculty of the University of Texas Medical Branch at Galveston, to be associate professor of surgery (anesthesiology) effective July 1, 1961; Fernando Tapia, M.D., at present Chief Psychiatrist and Director of Mental Health Division of the St. Louis County Health Department, clinical assistant professor of psychiatry, effective as of Jan. 1, 1961; Ernest E. McCoy, M.D., now assistant professor at Vanderbilt University, to be assistant professor of pediatrics, effective June 1, 1961; James F. Davenport, Jr., M.D., at present a captain in the U. S. Army Medical Corps, to be assistant professor of pathology, effective Oct. 1, 1961; William H. Soderstrom, M.D., of Iowa City, to be assistant professor of medicine, effective Sept. 1, 1961.

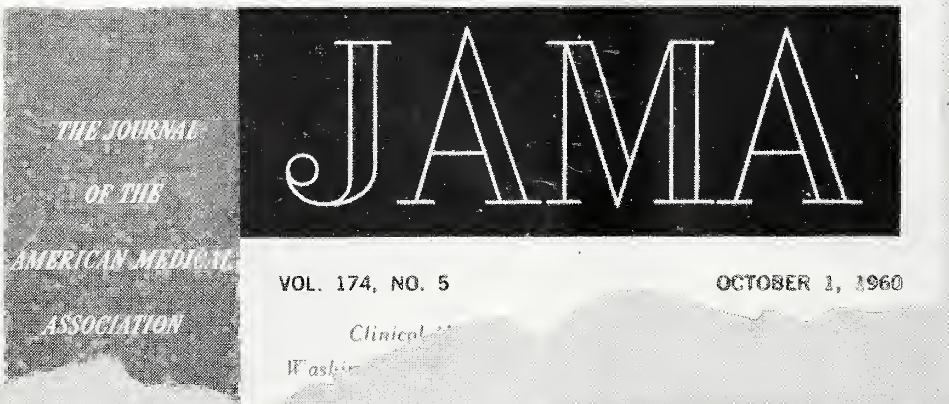
Trips and Talks

Dr. Vernon E. Wilson, dean and director of the University of Missouri Medical Center, acted as resource person for discussion group on "Care of the Physically Handicapped" at a meeting of the Missouri Health Council and the Nemours Foundation of Wilmington, Delaware, at the Southeast Missouri State College Memorial Hall in Cape Girardeau, Mo.

Dr. Wilson attended a dinner meeting April 17, of the Boone County Hospital Trustees. General discussion centered around mutual interests of the Boone County Hospital and the University of Missouri Medical Center.

Drs. M. D. Overholser, professor and chairman of the department of anatomy, E. W. Lowrance, professor, J. W. Brown and F. E. Doenges, associate professors, and H. E. Brown and J. C. Thaemert, assistant professors, attended the annual meeting of the American Association of Anatomists where they heard papers on anatomical research and saw new motion pictures on anatomical subjects.

Drs. Luckey, professor and chairman of the department of biochemistry, Koeppe, and White, associate professors, and Campbell and Franz, assistant professors, attended the Biological



THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION
JAMA
VOL. 174, NO. 5
OCTOBER 1, 1960

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"oral therapy of choice"
in management of diabetes . . . from th
mild stable adult to the severe labile juveni

Chemistry Section of the A.C.S. Meeting in St. Louis, March 26 to 30, where Dr. Luckey and Dr. Gehrke, professor of agricultural chemistry, presented a paper entitled, "Strengthening University Research Through a University Council Plan."

Dr. J. M. Martt, associate professor of medicine, will show a movie entitled "Diagnosis of Common Congenital Heart Defects," at an annual meeting of the A.M.A. in New York City, June 25 to 30.

Dr. Frank B. Engley, Jr., professor and chairman of the department of microbiology, attended the dedication exercises of the new Virology and Mycology Building of the Kansas City Field Station of the Communicable Disease Center of the U.S.P.H.S., on April 5. On April 6, he participated in a panel discussion on "Chemical, Biological and Radiological Injuries" at the Missouri Medical Center. On March 25, Dr. Engley presented a paper with Mrs. D. Breiner entitled "Stimulation of Pseudomonas Pigment and Fluorescence" at the Eastern Missouri Branks of the American Society for Microbiology meeting held in Columbia.

Dr. Herbert S. Goldberg, associate professor of microbiology, gave a seminar on "Public Health Problems of Antibiotic Residues in Foods" at a meeting sponsored by the Agricultural Chemistry Department, on March 27, in Schweitzer Hall.

Dr. James T. Barrett, associate professor of microbiology, lectured to the Civil Defense course of Columbia on "Preventive Medicine Aspects of Disaster," March 27.

Dr. Donald P. Durand, assistant professor of microbiology, presented a paper entitled "Interference Between Homologous Viable Viruses," at a meeting of the American Society for Microbiology, Eastern Missouri Branch in Columbia, March 25. Dr. Michael H. Ivey, assistant professor of microbiology, also attended the meeting.

Dr. M. Pinson Neal, professor emeritus of pathology, attended an annual session of the Missouri State Medical Association in Kansas City, March 19 through 22, where he served as a member of a standing committee on Scientific and Postgraduate Work, as a delegate from the Boone County Medical Society, and as Chairman of the Necrology Committee.

Dr. Robert L. Jackson, professor and chairman of the department of pediatrics, spent two days, March 16-18, as guest professor at the Uni-

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versity of Arkansas in Little Rock, and gave two formal lectures, one entitled "Foods or Supplements" and the other, "Juvenile Diabetes." In addition he attended numerous conferences and ward rounds.

Dr. Jackson also gave a seminar on "Food Additives From the Medical Point of View," at a meeting of the department of Agricultural Chemistry in Schweitzer Hall, April 10. From March 27 to 28, Dr. Jackson attended a meeting of the Brookhaven National Laboratory and United States Atomic Energy Commission in Upton, L. I., New York, where chairmen of the pediatrics department of the U. S. and Canada were invited to review present and future usefulness and place of nuclear medicine in pediatric practice and research.

Dr. Jackson and Dr. James M. Pickens, instructor in pediatrics, attended an Executive Committee meeting and a scientific dinner meeting of the Missouri Diabetes Association in Kansas City, March 20, at which time Dr. Jackson discussed the paper Dr. Hardin presented on electroencephalographic changes of children with diabetes.

The following members of the department of physiology and pharmacology attended the Federation Meetings in Atlantic City, April 10 through 16: Dr. B. A. Westfall, professor and chairman, D. W. S. Platner, professor, Dr. R. L. Russell, associate professor, Dr. M. L. Zatzman, assistant professor, Mr. J. B. Critz, assistant instructor, Mr. C. A. Robb, graduate assistant, Mr. J. L. Shields, assistant instructor, and Mr. D. D. Williams, graduate assistant. The paper "Thiopental Arrest and Spontaneous Recovery of the Isolated Rabbit Heart," by R. L. Russell and M. L. Zatzman, was presented by Dr. Russell on April 11.

Dr. James E. Randall, associate professor of physiology and biophysics, presented a seminar "Electrical Analogies of the Cardiovascular System" at the Electrical Engineering department on March 20, 1961.

Dr. James M. A. Weiss, associate professor and acting chairman of the department of psychiatry, was a panelist for the University Club of the University of Missouri, April 15. The topic of discussion was "Should Social Security Carry the Medical Care of the Aged?" Dr. Weiss also outlined the present program and future plans for the Department of Psychiatry here in terms of teaching, research and clinical services, at a meeting of the department April 19.

Drs. Weiss, David Davis, assistant professor of psychiatry, and Rodman P. Kabrick, assistant professor of clinical psychology, attended a meeting of the Eastern Missouri Psychiatric Society in St. Louis, April 25, where Dr. Warren Dunham, professor of sociology, Wayne University, spoke on "The Relationship of Psychiatric Disorder to the Social Environment." Dr. Davis was elected to membership in the Eastern Missouri Psychiatric Society and in the American Psychiatric Association at the meeting, and Dean Vernon E. Wilson was elected to honorary membership in the Society.

Dr. Davis gave an hour key-note lecture followed by participation in workshop as a resource person at a meeting sponsored by the State Department of Health and Education held at Kirksville State Teachers College March 29. The topic of discussion was "A New Look in Alcohol Education."

Dr. Rodman P. Kabrick, assistant professor of clinical psychology, attended the 11th annual spring meeting to implement the recommendations of the 1960 White House Conference on Children held in Jefferson City, April 15. The meeting was sponsored by the Missouri Association for Social Welfare—Missouri Council on Children and Youth. Dr. Kabrick and Dr. Weiss both attended a meeting of the American Orthopsychiatric Association in New York City, March 23 to 25, where Dr. Weiss served as resource participant and discussant in a work shop on "Work With the Family in Providing Care for the Aging Family Member."

Dr. Hugh E. Stephenson, Jr., professor of surgery, was moderator for a panel, "Management of Difficult Heart Problems," along with panelists Dr. T. E. Keats, professor of radiology, Dr. Jack Martt, associate professor of medicine, and Dr. Henry G. Stoeckel, associate professor of pediatrics, in Kansas City, March 21, sponsored by the Missouri Heart Association. Dr. Stephenson was also moderator in a panel discussion before a meeting of the American Association of University Professors, March 28.

On April 3, Dr. Stephenson spoke to the Clinical Society of the New York Polyclinic Medical School and Hospital on "An Evaluation of New Methods of Cardiac Resuscitation," in New York. He also attended the Fourth Annual Meeting of the Missouri State Surgical Society in Kansas City on March 20. Dr. John Legan, and Dr. Samuel Gray, residents in surgery were Dr. Stephenson's guests.

Dr. Samuel P. W. Black, professor of surgery (neurosurgery) attended meetings and recruitment of neurosurgery house officers in Mexico City, Mexico, from April 12 to 23. The meetings

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Dr. Ian M. Thompson, associate professor of surgery (urology), presented a movie on the operative cure of urinary incontinence and a talk on the subject to the staff of the Menorah Medical Center in Kansas City on March 11. He also presented a paper on carcinoma of the urethra, and an exhibit on kidney function following denervation at the South Eastern Section of the American Urological Association Meeting in Hollywood, Florida from March 19 to 24. The exhibit won the second prize for original research.

Dr. John C. Schuder, associate professor of research surgery, attended the Institute of Radio Engineers Meeting on March 20 through 23, where he presented a paper entitled "High-Level Electromagnet Energy Transfer Through a Closed Chest Wall," by Drs. Hugh E. Stephenson, Jr., John F. Townsend and Dr. Schuder. The meeting was held in New York City. Dr. Schuder also attended the meetings of the American Society for Artificial Internal Organs and Federation of American Societies for Experimental Biology from April 9 through 14, where he presented a paper entitled "Energy Transfer Into a Closed Chest by Means of Stationary Coupling Coils and a Portable High-Power Oscillator," by Dr. Hugh E. Stephenson, Jr., John Townsend and Dr. Schuder.

Dr. John A. Buesseler, associate professor of surgery (ophthalmology), presented a refresher course on "Office Ophthalmology" at the 103rd Annual Session of the Missouri State Medical Association at the Hotel Muehlebach in Kansas City, March 20.

Dr. Kenneth K. Keown, professor of surgery (anesthesiology), was moderator of a panel discussion "What's New" (in tranquilizers and analgesics, radiologic diagnosis, burns, and allergies) at a meeting of the Missouri State Medical Association in Kansas City, March 20. He also attended a meeting of the International Anesthesia Research Society in Houston, Tex. from April 9 to 13.

Miss Ruby Potter, Director of the School of Nursing, participated in a two-day meeting of the Expert Advisory Committee on the Professional Nurse Traineeship Program in Washington, D. C., March 23 to 24. This program, which is administered by the Division of Nursing, U.S.P.H.S., provides traineeships for qualified graduate nurse students in Bachelor's and Master's programs in Nursing.

Miss Rose B. Hayes, training specialist, Psychiatric Nursing Training Branch Detroit Institute of Mental Health, U. S. Public Health Service, visited the School of Nursing here in relationship to the five-year training grant held by the School of Nursing for Integration of Psychiatric Aspects in Nursing in the basic curriculum.

Mrs. Evelyn Eng, R.N.M.S., Director of Nursing Service, spoke April 29, at the Annual Institute of the Third District of Missouri State Nurses Association, at St. Luke's Hospital, St. Louis, on "Staffing Problems and Their Solutions."

On Friday, April 14, Mr. William K. Beatty, medical librarian and associate professor of medical bibliography, took part in a panel, "Training for Health Occupations in the Cooperative Occupational Education Program." This meeting was part of the Annual Spring Conference on Industrial Education which is sponsored jointly by the State Department of Education and the University's College of Education. Mr. Beatty also spoke to the members of the Optimist Club of Jefferson City, the discussion being about National Library Week and some of the activities of the University's Medical Library. The meeting was held on Monday, April 17.

DIVISION OF HEALTH

(Continued from page 552)

cant if maximum benefit is to be derived from the new vaccine. The aim would be to saturate the community with a monovalent vaccine within a period of days. Such a program would require a highly organized community effort and publicity campaign and a high degree of understanding, cooperation and public spiritedness on the part of practicing physicians. Much thought and planning will be necessary.

Every effort will be made to keep Missouri physicians abreast of significant developments in the new and promising area.

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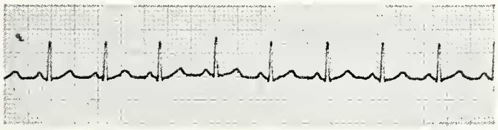

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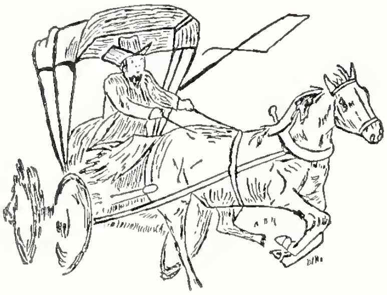

FORTY YEARS AGO

From every standpoint the 64th annual session of the Association, held in St. Joseph, May 24-26, was one of the most successful meetings in our history. The treasurer's report showed conclusively that the work of the Association could not proceed successfully on an assessment of $3.00 per member, so an amendment to increase the annual dues to $5.00 carried unanimously after a little discussion that emphasized the need for the increase.

All physicians of Independence have signed a petition urging the people of that city to support the proposition to issue bonds to enlarge the sewerage system.

Dr. H. J. Ravold, St. Joseph, was elected president of the Radiological Society of Missouri and Dr. E. C. Ernst, St. Louis, was reelected secretary.

Flying to the annual meeting was a novelty indulged in by Los Angeles physicians attending the California State Medical Association session at San Diego last month. The planes left Los Angeles in the morning and arrived at San Diego, a distance of 125 miles, an hour and a half later. "Safer than the auto and more comfortable," said the announcement giving the schedule.

At a meeting of the State Board of Health held on May 25, Dr. E. P. North, St. Louis, was reelected president and Dr. Cortez F. Enloe, Jefferson City, was elected secretary.

TWENTY-FIVE YEARS AGO

Dr. Dudley S. Conley, Columbia, was selected as President-Elect of the Association at the Columbia session, April 13, 14 and 15. Dr. Dudley became Dean of the School of Medicine in 1933 and is director of the University Hospitals and director of the surgical services in the hospitals.

Missouri Fellows, and especially those in the Jackson County Medical Society, were happy when the American Medical Association accepted the invitation of Missouri to meet in Kansas City in 1936 and now are happy in a job well done.

Out of approximately six million persons on relief in this country there are only about 50 physicians and surgeons, according to a survey made recently by the Kny-Scheerer Corporation, Long Island City, N. Y. The survey disclosed that there are one thousand lawyers, three thousand ministers and religious workers and more than 20,000 teachers on relief rolls.

The Rev. Alphonse M. Schwitalla, S.J., St. Louis, Dean of the School of Medicine of St. Louis University, was elected president of the North Central Association of Colleges and Secondary Schools at a meeting in Chicago on April 25.

TEN YEARS AGO

On May 9 some 300 Missourians attended the third annual state-wide Health Conference in Jefferson City which was sponsored by the Missouri Health Council.

Dedication services for the new Dunklin County Memorial Hospital at Kennett were held Sunday afternoon, May 13.

The Perry County Memorial Hospital, Perryville, opened officially at 9:00 a.m. April 16. This is the second hospital to be opened in Missouri built under the provisions of the Hill-Burton Act. For the construction of this hospital, the voters of Perry County passed a bond issue for $250,000 in 1946. With this and federal funds amounting to $125,000, the 50 bed institution was in the making.

The Missouri State Medical Secretaries and Assistants Society was organized at a meeting in Kansas City on April 22 with 25 members.

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Now available for use in your practice from The Wesson People . . . easy-to-use manual of 40 pages, including all necessary diet instructions . . . menus, recipes, shopping and cooking guidance . . . all worked out for you . . . so arranged and printed that you have only to check the desired daily calorie level before giving the book to your patient.

You will find this book invaluable for treating patients with elevated serum cholesterol.

Complete menus for 10 days enable you to prescribe diets which are appetizing, nutritiously adequate and which can exert cholesterol depressant activity. Special attention has been given to constructing the menu patterns so that they adhere as closely as permissible to the patient's normal eating habits.

NRC Standards fulfilled. Each menu has been calculated to provide the proper daily allowance of proteins, vitamins and other nutrients as recommended by the Food and Nutrition Board of the National Research Council.

Weight control is achieved as each day's menu is given at 3 calorie levels—1200, 1800 and 2600 calories. You prescribe the level most desirable and modify as desired.

Variety and appetite appeal for patient are built into the menu plan to an extent not previously accomplished. Alternate choices for main dishes minimize monotony, encourage the patient to follow closely the menu plan you specify.

Complete recipes—65 in all—are included to assure that the specified menus provide prescribed levels of calories, the pre-determined ratio of poly-unsaturated to saturated fat, plus essential nutrients.

Dietary fat is controlled so that approximately 36% of the total calories are derived from fat and at least 40% of these fat calories are from poly-unsaturated components (linoleates) as found in pure vegetable oil. The replacement of saturated dietary fat by this percentage of poly-unsaturated fat has been found in clinical studies most effective in the reduction of serum cholesterol and in its maintenance at desirable levels. More liberal menus are provided for maintenance after the patient's progress indicates that desired therapeutic results have been accomplished.

Family meal preparation is simplified. The menus are planned around favorite foods having wide appetite appeal for all members of the household. Patients can entertain in comfort—enjoy cakes, cookies, snacks, prepared with recipes which meet medical requirements.

A high degree of satiety is achieved even at the lower calorie levels, because Wesson provides an unexcelled source of concentrated, slow-burning food energy.

Adaptable for use with diabetics. Carbohydrates have been calculated to fall within the acceptable range for patients to whom a diet planned for diabetes is important. Calories, which must be supplied from fat when the carbohydrate intake is limited, are provided by desirable poly-unsaturated vegetable oil.

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Palmitic, stearic and myristic glycerides (saturated)	25-30%
Phytosterol (Predominantly beta sitosterol)	0.3-0.5%
Total tocopherols	0.09-0.12%

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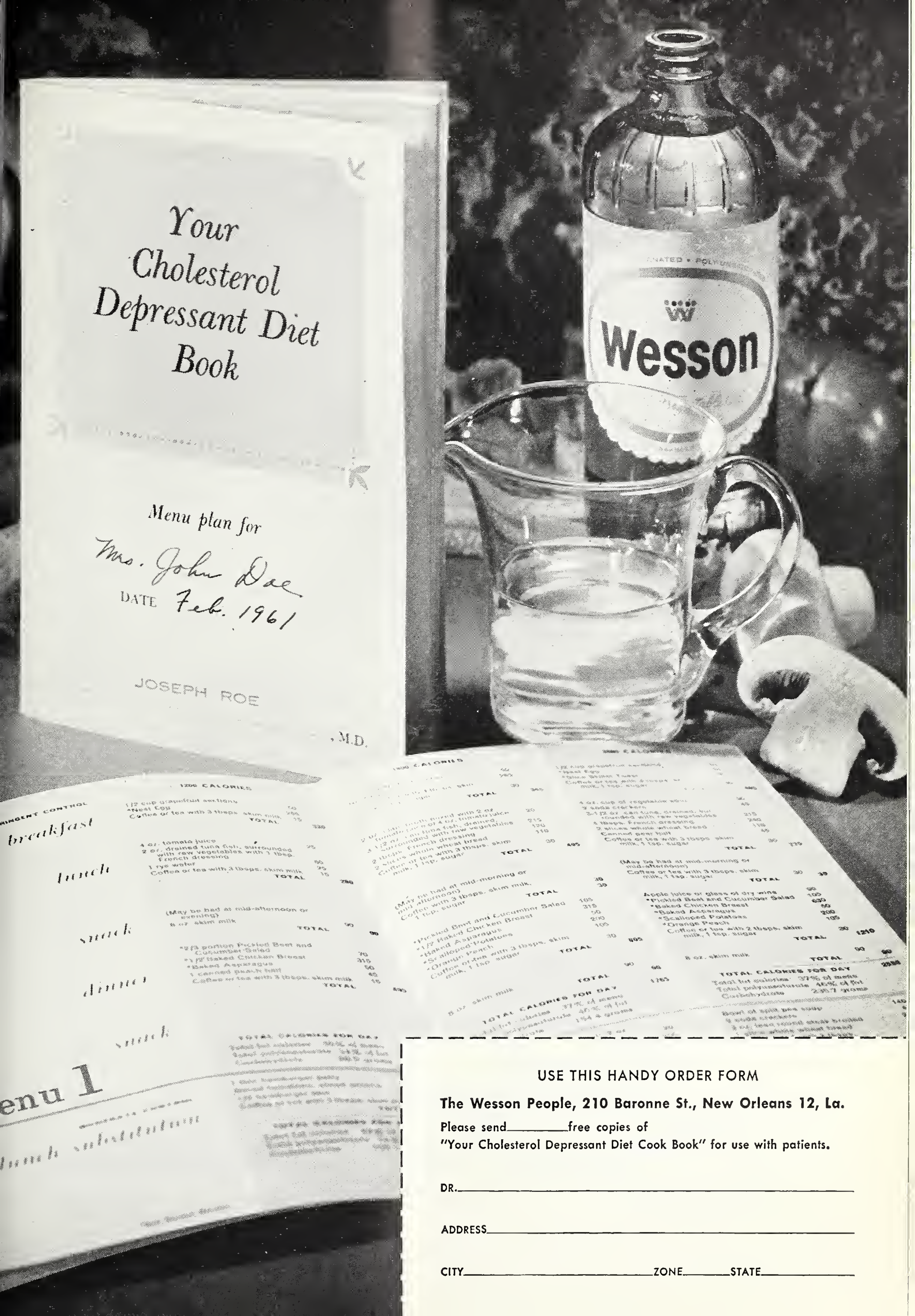
Poly-unsaturated Wesson is unsurpassed by any readily available brand, where a vegetable (salad) oil is medically recommended for a cholesterol depressant regimen.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lunch
snack
dinner
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WOMAN'S AUXILIARY

(Continued from page 554)

has American medicine faced a greater challenge to its existence. Our medical schools are losing excellent candidates to other professions because of fear of what the future may hold for the medical profession. We are constantly bombarded with propaganda that socialized medicine is inevitable, so why do we waste our time fighting it? I'm sure the early American Patriots at the Boston Tea Party were urged to give up also, but fortunately for all of us today they had indomitable courage and spirit.

I think Operation Coffee Cup 1961, will have the same success as Boston Tea Party 1773, if we are as familiar with the cause for which we are fighting as the early Patriots were. Our success lies in refuting false propaganda by truth and awakening the public to the real issues.

Our Medical Association suggests we coordinate our program with each local medical society by the following steps:

1. Appointment of an active legislative committee, if there is not already one, which would provide liaison with the medical society and follow-through campaign.
2. Organize efforts to obtain the cooperation of every Auxiliary member in writing letters to the legislature and Congress and interesting her friends in similar support.
3. Organize efforts to obtain the support of other groups and organizations, particularly women's groups.

We have been asked for our assistance in this campaign, and I know every Auxiliary will give full support to their medical societies in meeting this latest challenge to the medical profession. This is a Personal Project for Every Auxiliary Member and we ask for the support of each and every one of you.

TUBERCULOSIS ABSTRACT

(Continued from page 572)

What Price Resistance?

What can be done about this trend? The first step, of course, is to recognize that the emergence of drug-resistant tubercle bacilli is not merely a clinical handicap, but also an epidemiologic fact. Our attitude toward drug resistance must be refocused to recognize its broad public health implication as well as its disadvantages to the individual patient.

(Continued on page 614)

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For PREVENTATIVE and REHABILITATIVE GERIATRICS

PROATRIC'S TOTAL FORMULA PROVIDES THESE IMPORTANT ESSENTIALS . . . . .

• Safer 20-1 Hormone Ratio* • Seven Essential B Vitamins • Three Fat-Soluble Vitamins • Three Lipotropes • Nine Minerals • Plus Rutin, Citrus Bioflavanoids, and Vitamin C.

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Try free clinical course of treatment in your own practice. Samples and technical data when requested on your professional letterhead.

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*JAMA 163: 359,1957 (Feb. 2)

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nutrition…present as a modifying or complicat- factor in nearly every illness or disease state"[1]

1. Youmans, J. B.: Am. J. Med. 25:659 (Nov.) 1958

diac diseases "Who can say, for example, whether the patient chronically ith myocardial failure may not have a poorer myocardium because of a moderate iency in the vitamin B-complex? Something is known of the relationship of vitamin the intercellular ground substance and repair of tissues. One may speculate upon effects of a deficiency of this vitamin, short of scurvy, upon the tissues in chronic ise."[2] 2. Kampmeier, R. H.: Am. J. Med. 25:662 (Nov.) 1958.

hritis "It is our practice to prescribe a multiple vitamin preparation to patients rheumatoid arthritis simply to insure nutritional adequacy . . ."[3]
ndez-Herlihy, L: Lahey Clinic Bull. 11:12 (July-Sept.) 1958.

estive diseases Symptoms attributable to B-vitamin deficiency are com- ly observed in patients on peptic ulcer diets.[4] Daily administration of therapeutic mins to patients with hepatitis and cirrhosis is recommended by the National earch Council.[5] 4. Sebrell, W. H.: Am. J. Med. 25:673 (Nov.) 1958. 5. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition, National Academy of Sciences and National Research Council, Washington, D. C., 1952, p. 57.

generative diseases "Studies by Wexberg, Jolliffe and others have indi- d that many of the symptoms attributed in the past to senility or to cerebral arterio- osis seem to respond with remarkable speed to the administration of vitamins, icularly niacin and ascorbic acid. These facts indicate that the vitamin reserve of g persons is lowered, even to the danger point, more than is the case in the average erican adult."[6] 6. Overholser, W., and Fong, T. C. C. in Stieglitz, E. J.: Geriatric Medicine, 3rd edition, J. B. Lippincott, Philadelphia, 1954, p. 264.

ectious diseases Infections cause a lowering of ascorbic acid levels in the ma; and the absorption of this vitamin is reduced in diarrheal states.[7] 7. Goldsmith, G A.: nce on Vitamin C. The New York Academy of Sciences, New York City, Oct. 7 and 8, 1960. Reported in: Medical Science 8:772 (Dec.10) 1960.

betes Diabetics, like all patients on restricted diets, require an extra source itamins.[8] "Rigidly limiting the bread intake of the diabetic patient automatically inates a large amount of thiamin from the diet. . . . There is some evidence of rference with normal riboflavin utilization during catabolic episodes."[9]
an G. G.: Diseases of Metabolism 4th edition W. B. Saunders, Philadelphia, 1959, p. 812. 9. Pollack, H.: Am. J. Med. 25:708 (Nov.) 1958.

FULL INFORMATION SEE YOUR SQUIBB PRODUCT REFERENCE OR PRODUCT BRIEF.

Chesterton, in one of his famous paradoxes, is quoted as saying, "Whatever is worth doing is worth doing badly." We sometimes seem to adopt this point of view in insisting that inadequate treatment of tuberculosis is better than no treatment at all. Token treatment with isoniazid alone has been prescribed for patients all over the world, many of them with far advanced tuberculosis, extremely poor nutrition, and socioeconomic burdens of crushing magnitude. We will not cure them, we have argued, but a few months of bacteriologic remission and of clinical improvement is justified on public health grounds.

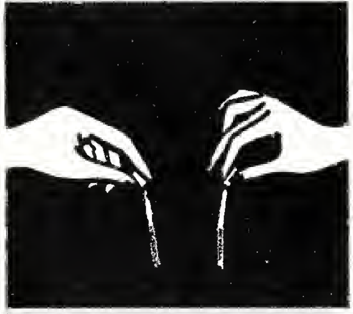
We must now begin to ask ourselves whether widespread infection by drug-resistant tubercle bacilli isn't too high a price to pay for such transitory benefits. What has always been recognized as inferior treatment from a clinical point of view seems now to be losing its justification from the public health point of view. The administration of isoniazid to patients who have no real chance of achieving complete control of their disease with this drug alone may be shortsighted public health practice as well as second-rate medicine.

Even in underdeveloped areas, the continued use of inadequate chemotherapy as a public health measure is not being recognized for what it is—a two-edged sword which may make the eventual control of tuberculosis in those areas more rather than less difficult than it need be.

Clinicians, too, need to sharpen their public health perspective in prescribing treatment. In planning the treatment of newly-diagnosed patients, information about the drug susceptibility of patients' organisms is essential. With the growing possibility of drug-resistant infection, pretreatment drug susceptibility studies are essential. Much of the delay and much of the reluctance of clinicians to wait for this information before starting treatment could be avoided if susceptibility studies were started routinely on the diagnostic sputum examination.

If for any reason one cannot await the results of pretreatment susceptibility tests, one may initiate treatment with a second-time combination, such as cycloserine and viomycin, or initiate treatment with all three major drugs, each given daily. In either instance substantial therapeutic progress can be made with little risk and without hazarding the loss of susceptibility to one of the major drugs. Once the laboratory information is available, the drug treatment can be tailored to provide the most effective combination for the patient's specific needs.

Tested . . . and proved . . .
ORAL therapy in diaper rash!



Effective therapy! Thousands of pediatricians and general practitioners prescribe Pedameth for ammonia dermatitis—and they continue to prescribe it. Clinical tests have proved its effectiveness. Pedameth is safe because it contains only dl-methionine (0.2 Gm.) one of the essential amino acids. When Pedameth is administered, the pH of the urine is lowered and an as-yet-unknown antibacterial agent appears in the urine. Pedameth works . . . it's the safe, effective, convenient answer to ammoniacal diaper rash.

Convenient . . . simply open a capsule and add the contents to the baby's daily formula, or to fruit juice or water. No lotions . . . no rinses . . . no ointments . . . just oral therapy.

Send for samples and literature.

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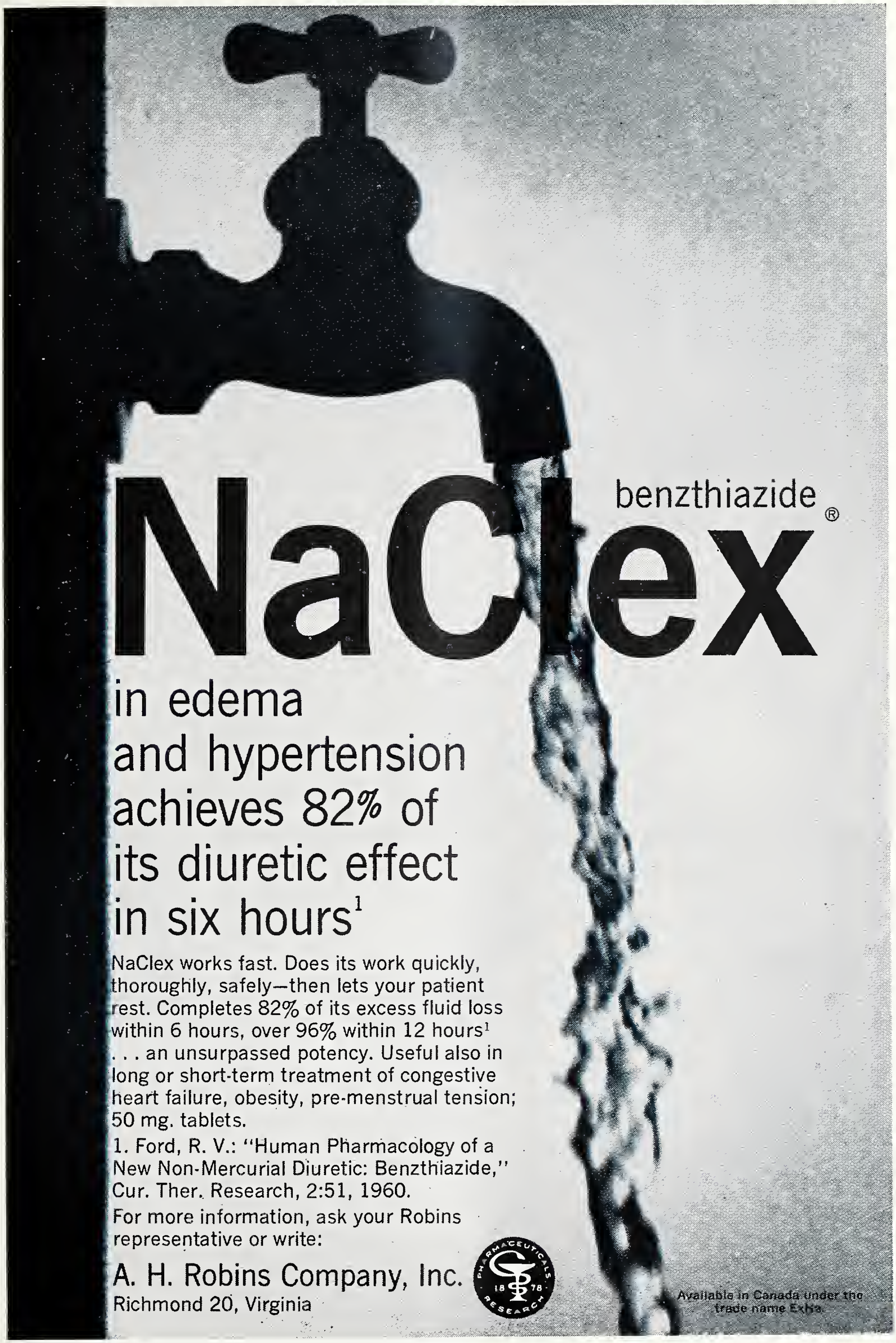
(dl-methionine DURST)



NaClex® benzthiazide

in edema and hypertension achieves 82% of its diuretic effect in six hours[1]

NaClex works fast. Does its work quickly, thoroughly, safely—then lets your patient rest. Completes 82% of its excess fluid loss within 6 hours, over 96% within 12 hours[1] . . . an unsurpassed potency. Useful also in long or short-term treatment of congestive heart failure, obesity, pre-menstrual tension; 50 mg. tablets.

1. Ford, R. V.: "Human Pharmacology of a New Non-Mercurial Diuretic: Benzthiazide," Cur. Ther. Research, 2:51, 1960.

For more information, ask your Robins representative or write:

A. H. Robins Company, Inc.
Richmond 20, Virginia

Available in Canada under the trade name Exna.

BOOKS RECEIVED

INFECTIOUS DISEASES OF CHILDREN, by Saul Krugman, M.D., Professor and Chairman, Department of Pediatrics, New York University School of Medicine, New York, N. Y., Director, Pediatric Service, Bellevue Hospital Center, New York, N. Y., Director, Pediatric Service, University Hospital, New York, N. Y.; and Robert Ward, M.D., Professor and Head, Department of Pediatrics, University of Southern California School of Medicine, Los Angeles, Calif., Physician-in-Chief, Childrens Hospital, Los Angeles, Calif. Second Edition. The C. V. Mosby Company, St. Louis, 1960. Price: $13.00.

W. B. Saunders Company features the following recent books in their full page advertisement appearing elsewhere in this issue: White, CLINICAL DISTURBANCES OF RENAL FUNCTION giving diagnosis and treatment measures for kidney disorders; Rubin, THORACIC DISEASES covering both medical and surgical management; Mayo Clinic, DIET MANUAL giving recent advances in food, vitamin and dietary practice.

OVER 80 YEARS' SPECIALIZED EXPERIENCE IN THE RESTORATIVE TREATMENT OF

"THE PROBLEM DRINKER"

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- the most modern, coordinated, comprehensive, rehabilitative regimen
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THE KEELEY INSTITUTE
DWIGHT, ILLINOIS
Member American Hospital Association, Member Illinois Hospital Association. Licensed by the Department of Public Health, State of Illinois.

Coca-Cola, too, has its place in a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy.. brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

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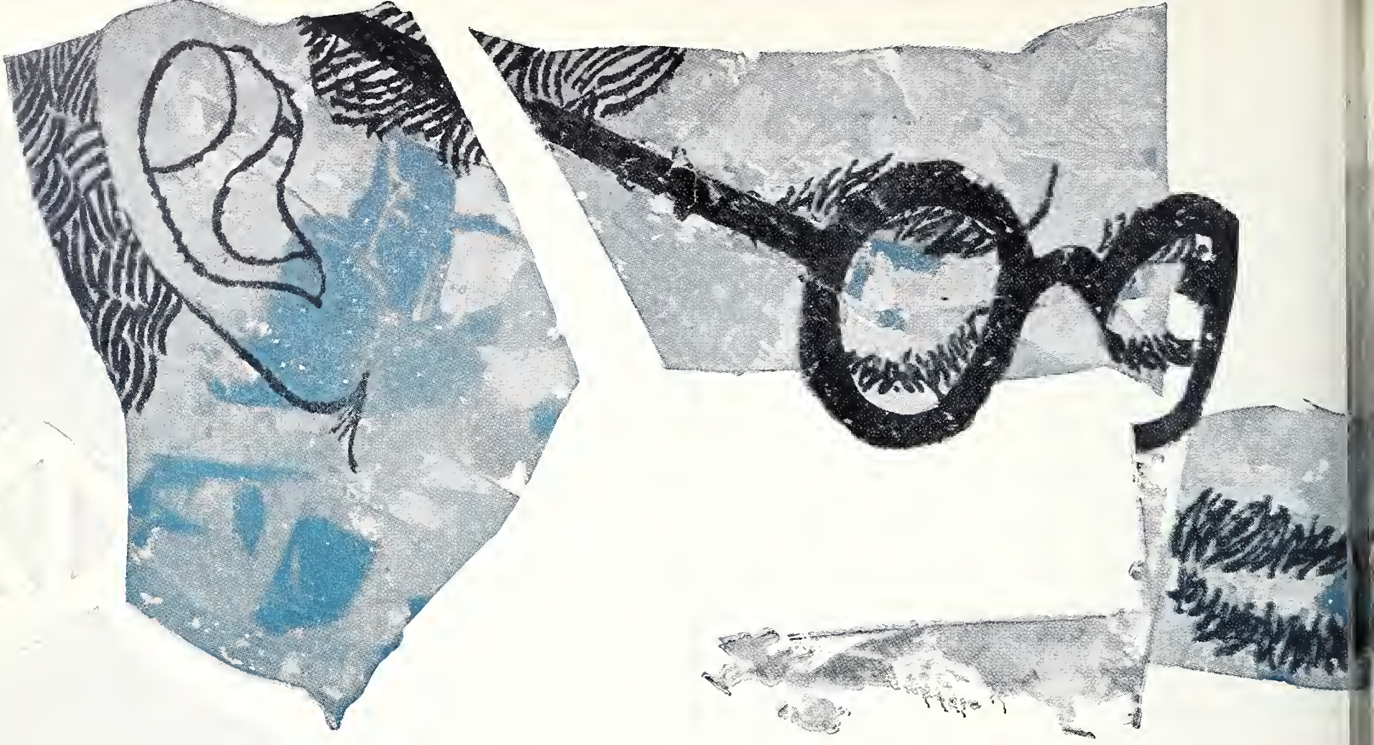
Missouri Medicine

OURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

JULY, 1961

VOLUME 58, NUMBER 7

Minutes
103rd Annual Session
of the
Missouri State Medical Association



inside as well as outside the hospital...
staphylococci usually remain sensitive to

CHLOROMYCETI

(chloramphenicol, Parke-Da s)

That the sensitivity patterns of "street" staphylococci differ widely from those f "hospital" staphylococci is a well-established clinical fact.[1-5] Although strains f staphylococci encountered in general practice have remained relatively sensitive o a number of antibiotics,[6] the problem of antibiotic-resistant staphylococci appea s to be a threat to all patients in hospitals today. It is encouraging to note, howev "...that a relatively small percentage of strains develop resistance to chlora- phenicol, despite the consumption of large amounts of this antibiotic."[7]

In one hospital, for example, CHLOROMYCETIN "...was the only widely us antibiotic to which few of the strains were resistant."[8] In another hospital, desp steadily increasing use of CHLOROMYCETIN since 1956, "...the percentage f chloramphenicol-resistant strains has actually been lower in subsequent years[1] Elsewhere, insofar as hospital staphylococci are concerned, it appears that "...t problem of antibiotic resistance can be regarded as minimal for chloramphenicol[2]

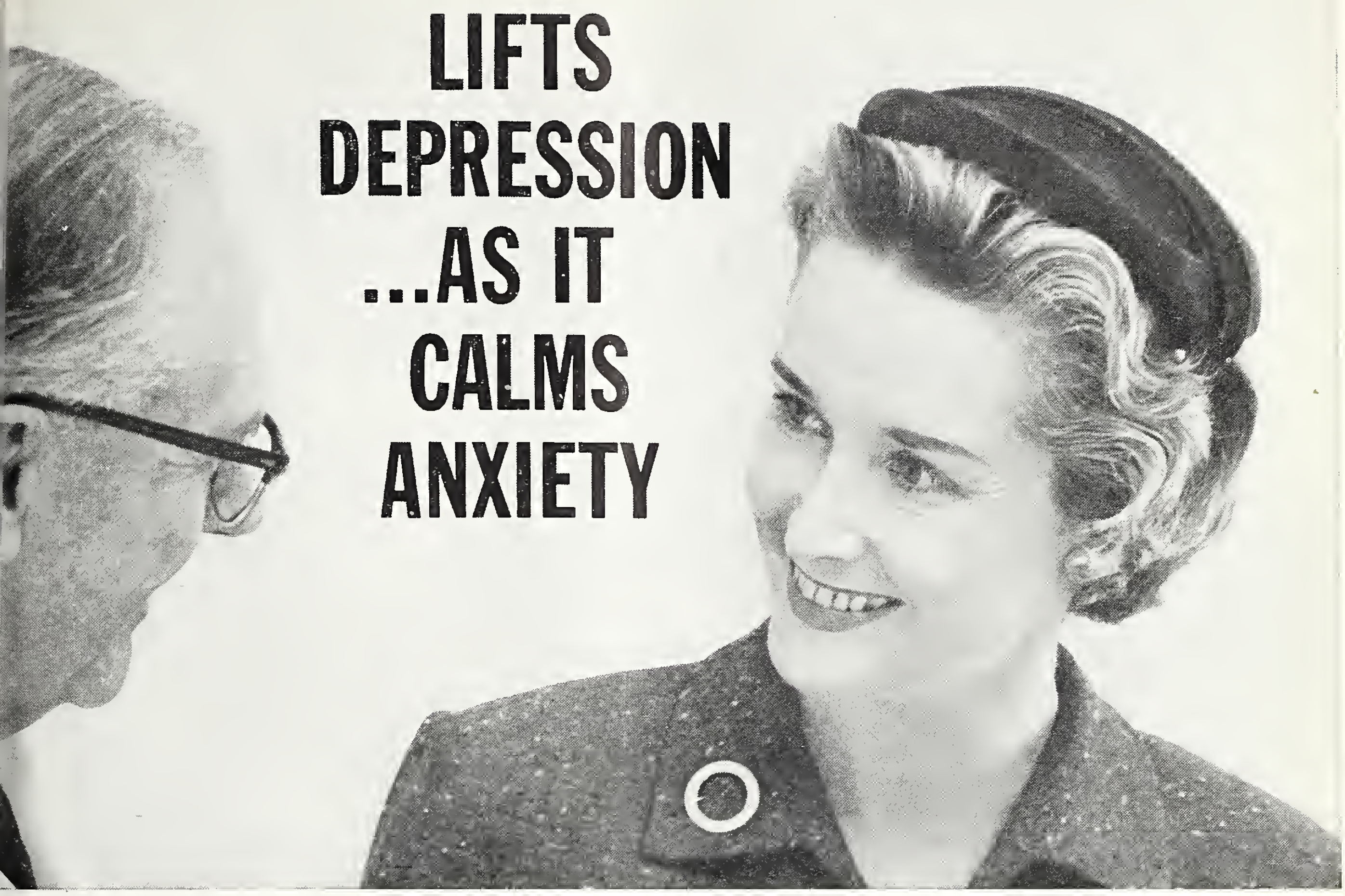
CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, includ Kapseals® of 250 mg., in bottles of 16 and 100.

See package insert for details of administration and dosage.

Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytope granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias h occurred after short-term and with prolonged therapy with this drug. Bearing in mind the possibility t such reactions may occur, chloramphenicol should be used only for serious infections caused by organi which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other potentially dangerous agents will be effective, or in the treatment of trivial infections such as colds, in- enza, viral infections of the throat, or as a prophylactic agent.

Precautions: It is essential that adequate blood studies be made during treatment with the drug. W blood studies may detect early peripheral blood changes such as leukopenia or granulocytopenia, bef they become irreversible, such studies cannot be relied upon to detect bone marrow depression prio development of aplastic anemia.

[illegible] 9/2/62



"I feel like my old self again!" Thanks to your balanced Deprol therapy, her depression has lifted and her mood has brightened up – while her anxiety and tension have been calmed down. She sleeps better, eats better, and normal drive and interest have replaced her emotional fatigue.

Brightens up the mood, brings down tension

Deprol's balanced action avoids "seesaw" effects of energizers and amphetamines. While energizers and amphetamines may stimulate the patient – *they often aggravate anxiety and tension.*

And although amphetamine-barbiturate combinations may counteract excessive stimulation – *they often deepen depression and emotional fatigue.*

These "seesaw" effects are avoided with Deprol. It lifts depression as it calms anxiety – a balanced action that brightens up the mood, brings down tension, and relieves insomnia, anorexia and emotional fatigue.

Acts rapidly – you see improvement in a few days. Unlike the delayed action of most other antidepressant drugs, which may take two to six weeks to bring results, Deprol relieves the patient quickly – *often within a few days.* Thus, the expense to the patient of long-term drug therapy can be avoided.

Acts safely – no danger of liver or blood damage. Deprol does not cause liver toxicity, anemia, hypotension, psychotic reactions or changes in sexual function – frequently reported with other drugs.

▲Deprol▲®

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be gradually increased up to 3 tablets q.i.d.
Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.
Supplied: Bottles of 50 light-pink, scored tablets. Write for literature and samples.

CD-4524 WALLACE LABORATORIES / *Cranbury, N. J.*

Across
Missouri

Withholding of State Income Tax by Employers

H.B. 35, adopted by both houses of the legislature with emergency clauses, will take effect July 1, 1961. The act provides that all employers, including physicians, shall withhold state income taxes from the wages of their employees, and transmit such withheld wages to the state every three months.

In addition, the self employed, including physicians, are required to file estimates of anticipated income and to make quarterly payments as they are now required to do under federal law.

A list of general instructions, issued by the Department of Revenue, Withholding Tax Section, P. O. Box 999, Jefferson City, Mo., contains information about the following: Employers, Employers Income Tax Withholding Identification Number, Employees, Taxable Wages, Exemptions from Withholding Tax, Employers Compensation, Non-Resident Employees, Payroll Period, Quarterly Reports of Income Tax Withheld, Receipts and Withholding Tables.

Following is a "Calendar of Employer's Duties":

Calendar of Employer's Duties

On or Before June 10, 1961:

Secure an "Employee's Witholding Exemption Certificate," Form MoWH-4, from each employee. New certificate must be secured when exemption status changes. If non-resident secure special allocation certificate provided earnings are partly within and partly without Missouri.

On and After July 1, 1961:

Withhold Missouri State Income Tax on all compensation as defined in Section 5 of instructions.

On or Before October 31, 1961, and January 31, 1962:

File quarterly return with Director of Revenue, Withholding Tax Section, P. O. Box 999, Jefferson City, Missouri, and pay amount of state income taxes withheld from employees for previous quarter. (See instruction 7 for reimbursement to employer for collection.)

On or Before January 31, 1962:

Each employee must be given in duplicate an Employee's Withholding Tax Statement, Form MoWH-2 showing: 1. Name of employer, 2. Name of individual, 3. Total amount paid as compensation, 4. Total amount deducted and withheld for Missouri Income Tax, 5. Such other information as is denoted on the form.

Also:

File with Director of Revenue, "Employer's Annual Reconciliation of Missouri Income Tax Withheld" (Form MoWH-3), together with all Income Tax Division copies (Copy A), of withholding statements furnished employees during preceding two quarters.

It is recommended that the physician's accountant, bookkeeper or tax consultant be consulted immediately regarding this law. Further, request identification number and other information immediately.

Do start withholding July 1, 1961.

Volume 58, Number 7—July, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Minutes of the House of Delegates

One Hundred Third Annual Session
March 19, 20, 21, 22, 1961
Kansas City

Sunday Session

The first meeting of the House of Delegates of the 103rd Annual Session of the Missouri State Medical Association was called to order at 1:30 p.m., March 19, in the Colonial Ball Room, Hotel Muehlebach, Kansas City, with Oscar P. Hampton, M.D., University City, Speaker, presiding.

Officers, Councilors and Delegates present during the Annual Session follow:

Officers

President	R. O. Muether, St. Louis
President-Elect	J. H. Summers, Lebanon
Secretary	John I. Matthews, Jefferson City
Treasurer	Charles R. Doyle, St. Louis
Vice President	Robert B. Bassett, St. Louis
Vice President	Thomas S. Fleming, Moberly
Vice President	Claude J. Hunt, Kansas City
Speaker of the House	Oscar P. Hampton, University City
Vice Speaker of the House	William C. Mixson, Kansas City

Councilors

1st District	Donald M. Dowell, Chillicothe
3rd District	Leonard T. Furlow, St. Louis
4th District	Paul R. Whitener, St. Louis
5th District	Byron M. Stuart, Boonville
6th District	O. B. Barger, Harrisonville
7th District	Kenneth C. Hollweg, Kansas City
8th District	W. W. Tillman, Springfield
9th District	E. A. Stricker, St. James
10th District	Ben M. Bull, Ironton

DELEGATES

First District

Andrew	Warren C. Baker, Savannah
Buchanan	Joseph L. Fisher, St. Joseph
Buchanan	John N. Martin, St. Joseph
Clay	Reinhardt D. Dwyer, N. Kansas City
Clay	James W. Willoughby, Liberty
Clinton	P. T. Luckenbill, Plattsburg
Grand River	
Caldwell	Frank R. Daley, Hamilton
Livingston	V. D. Vandiver, Chillicothe
Carroll	Eugene Bales, Carrollton
Grundy	C. H. Cullers, Trenton
Daviess	
Harrison	A. F. Nibbe, Bethany
Linn	Robert W. Smith, Marceline
Mercer	
DeKalb	J. H. Sweiger, Maysville
Nodaway-Holt-Atchison-Gentry-Worth	E. D. Imes, Maryville
Nodaway-Holt-Atchison-Gentry-Worth	Frank B. Matteson, Grant City
Platte	Ethlyn Jennings, N. Kansas City

Second District

Chariton-Macon-Monroe-Randolph	D. D. Stuart, Brunswick
Chariton-Macon-Monroe-Randolph	Donald Eggleston, Macon
Chariton-Macon-Monroe-Randolph	F. A. Barnett, Paris
Chariton-Macon-Monroe-Randolph	Avery P. Rowlette, Moberly
Lewis-Clark-Scotland	Landis Y. Davis, Canton
Marion-Ralls-Shelby	Robert Lanning, Hannibal
North Central	
Adair	M. T. English, Kirksville
Pike	R. F. Christensen, Louisiana

Third District

St. Louis City	Paul F. Max, St. Louis
St. Louis City	Stanley F. Hampton, St. Louis

St. Louis City	Arthur W. Neilson, St. Louis
St. Louis City	Charles Sherwin, St. Louis
St. Louis City	G. L. Hawkins, St. Louis
St. Louis City	Louis H. Kohler, St. Louis
St. Louis City	Walter Baumgarten, Jr., St. Louis
St. Louis City	Roy V. Boedeker, St. Louis
St. Louis City	David N. Kerr, St. Louis
St. Louis City	Joseph C. Edwards, St. Louis
St. Louis City	Henry C. Allen, Clayton
St. Louis City	R. B. Bassett, St. Louis
St. Louis City	Peter G. Danis, St. Louis
St. Louis City	Charles R. Doyle, St. Louis
St. Louis City	Joseph C. Peden, St. Louis
St. Louis City	J. William Thompson, St. Louis
St. Louis City	Donald C. Weir, St. Louis
St. Louis City	Edward Kinsella, St. Louis
St. Louis City	James M. Macnish, St. Louis
St. Louis City	G. Russell Aufderheide, St. Louis
St. Louis City	T. J. Weiler, St. Louis
St. Louis City	W. J. Gillespie, St. Louis
St. Louis City	J. O. Lottes, St. Louis
St. Louis City	Charles H. Nicolai, St. Louis
St. Louis City	J. L. Lucido, St. Louis

Fourth District

Franklin-Gasconade-Warren	William R. Richardson, Union
Franklin-Gasconade-Warren	Carvel T. Shaw, Herman
Franklin-Gasconade-Warren	Harold T. Hoelscher, Warrenton
Jefferson	F. L. Kozal, Crystal City
Lincoln-St. Charles	E. O. Damron, Elsberry
Lincoln-St. Charles	William Poggemeier, St. Charles
St. Louis County	Harold Bailey, St. Louis
St. Louis County	M. A. Diehr, St. Louis
St. Louis County	Joseph B. Kendis, St. Louis
St. Louis County	Roy A. Walther, Jr., St. Louis
St. Louis County	O. P. Hampton, St. Louis
St. Louis County	R. C. Kingsland, Clayton
St. Louis County	Richard Sutter, St. Louis
St. Louis County	George J. L. Wulff, St. Louis
St. Louis County	E. W. Davis, St. Louis

Fifth District

Audrain	Benjamin N. Jolly, Mexico
Boone	M. Pinson Neal, Columbia
Boone	James C. Cope, Columbia
Callaway	James K. Ritterbusch, Fulton
Camden	
Cole	George D. Shull, Jefferson City
Cooper	G. W. Winn, Boonville
Howard	W. J. Shaw, Fayette
Miller	
Moniteau	
Montgomery	E. J. T. Andersen, Montgomery City
Morgan	Ray Lyle, Versailles

Sixth District

Benton	
Henry	William Bradshaw, Clinton
Johnson	
Lafayette-Ray	I. E. Goldberg, Braymer
Lafayette-Ray	
Pettis	C. G. Stauffacher, Sedalia
Saline	Alex McBurney, Slater
West Central	
Bates	A. L. Hansen, Butler
Cass	Edward Jones, Harrisonville
Cedar	Robert L. Magee, El Dorado Springs
St. Clair	Donald H. Giesler, Osceola
Vernon	Rolla Wray, Nevada

Seventh District

Jackson	Dillard M. Eubank, Raytown
Jackson	W. R. Eubank, Kansas City
Jackson	W. Wilmot Gist, Kansas City
Jackson	W. M. Kitchen, Kansas City
Jackson	James R. McVay, Jr., Kansas City
Jackson	Ralph Perry, Kansas City
Jackson	W. F. Sanders, Kansas City
Jackson	Charles B. Wheeler, Jr., Kansas City
Jackson	John F. Bowser, Kansas City
Jackson	Philip L. Byers, Kansas City
Jackson	Raymond Stockton, Kansas City
Jackson	Harold L. Gainey, Kansas City
Jackson	W. W. Greene, Kansas City
Jackson	Gerald L. Miller, Kansas City
Jackson	William C. Mixson, Kansas City
Jackson	Hector W. Benoit, Jr., Kansas City

Eighth District

Barton-Dale	Alvin R. Cain, Lamar
Dallas-Hickory-Polk	O. A. Griffin, Buffalo
Dallas-Hickory-Polk	Doyle McCraw, Bolivar
Greene	John P. Ferguson, Springfield
Greene	Stanley Peterson, Springfield
Greene	Kenneth E. Knabb, Springfield
Greene	F. T. H'Doubler, Jr., Springfield
Jasper	M. Foster Whitten, Carthage
Jasper	G. A. Schulte, Joplin
Ozarks	
Barry	Mary Newman, Cassville
Lawrence	Kenneth Glover, Mount Vernon
Stone	Fred Wommack, Crane
Christian	
Taney	
Newton	G. W. Blankenship, Neosho
McDonald	J. J. Royce, Noel
Webster	T. M. Macdonnell, Marshfield

Ninth District

Mid-Missouri	
Phelps	M. K. Underwood, Rolla
Crawford	
Dent	B. J. Bass, Salem
Pulaski	
Maries	
Laclede	H. W. Carrington, Lebanon
South Central	
Howell	Harold W. Miller, Willow Springs
Oregon	C. W. Cooper, Thayer
Texas	Garrett S. Hogg, Jr., Cabool
Wright	
Douglas	
Ozark	

Tenth District

Butler-Ripley-Wayne	Tom Burcham, Doniphan
Butler-Ripley-Wayne	Fred Biggs, Poplar Bluff
Cape Girardeau	Harold D. Ridings, Cape Girardeau
Dunklin	W. D. English, Cardwell
Mineral Area	
St. Francois	Robert A. Huckstep, Farmington
Iron	
Madison	
Washington	
Reynolds	
St. Genevieve	
Pemiscot	
Perry	A. E. McDermott, Perryville
Semo	
Stoddard	
New Madrid	
Mississippi	
Scott	W. O. Finney, Chaffee

The President, R. O. Muether, M.D., St. Louis, delivered the invocation.

John F. Bowser, M.D., Kansas City, gave a preliminary report of the Committee on Credentials. The Speaker announced that the roll call would be marked from the delegates' credential cards.

The registration desk was a gathering place.

Kenneth C. Hollweg, M.D., Kansas City, reported briefly for the General Committee on Arrangements.

Speaker: The next order of business is the reading of the minutes of the previous meeting. These were published in the July 1960 issue of Missouri Medicine.

Upon motion, duly seconded, the minutes were approved as published.

The Speaker gave instructions to the delegates and appointed the following Reference Committees:

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

W. D. English, M.D., Cardwell, Chairman.
Stanley F. Hampton, M.D., St. Louis.
William R. Richardson, M.D., Union.
James K. Ritterbusch, M.D., Fulton.
D. D. Stuart, M.D., Brunswick.

REFERENCE COMMITTEE ON RESOLUTIONS

William M. Kitchen, M.D., Kansas City, Chairman.
Roy A. Walther, Jr., M.D., St. Louis.
James M. Macnish, M.D., St. Louis.
Kenneth E. Knabb, M.D., Springfield.
Robert W. Smith, M.D., Marceline.

REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

Joseph L. Fisher, M.D., St. Joseph, Chairman.
George D. Shull, M.D., Jefferson City.
Robert B. Bassett, M.D., St. Louis.
R. F. Christensen, M.D., Louisiana.
W. W. Gist, M.D., Kansas City.

REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

Doyle C. McCraw, M.D., Bolivar, Chairman.
Harold L. Gainey, M.D., Kansas City.
Peter G. Danis, M.D., St. Louis.
Fred J. Biggs, M.D., Poplar Bluff.
Harold W. Miller, M.D., Willow Springs.

REFERENCE COMMITTEE ON REPORTS OF OFFICERS

Walter Baumgarten, Jr., M.D., St. Louis, Chairman.
George J. L. Wulff, M.D., St. Louis.
James R. McVay, Jr., M.D., Kansas City.
Robert L. Magee, M.D., El Dorado Springs.
James W. Willoughby, M.D., Liberty.

REFERENCE COMMITTEE ON NECROLOGY

M. Pinson Neal, M.D., Columbia, Chairman.
A. L. Hansen, M.D., Butler.
Edgar W. Davis, M.D., St. Louis.
Edward D. Kinsella, M.D., St. Louis.
G. A. Schulte, M.D., Joplin.

R. O. Muether, M.D., St. Louis, presented the President's Message.

PRESIDENT'S MESSAGE

Mr. Speaker, Members of the House of Delegates:

It is customary for the retiring president at this point to review briefly what has been accomplished during the year, to hint about what was not done, and perhaps philosophize about the future.

The past year has, for me, been a rather pleasant one—free of major controversies or conflicts.

The state legislature was not in session for most of the year—that avoids certain problems.

A Presidential election was waged and decided—perhaps in a way that was not satisfactory to everyone, but pleasing to a little more than one half the population.

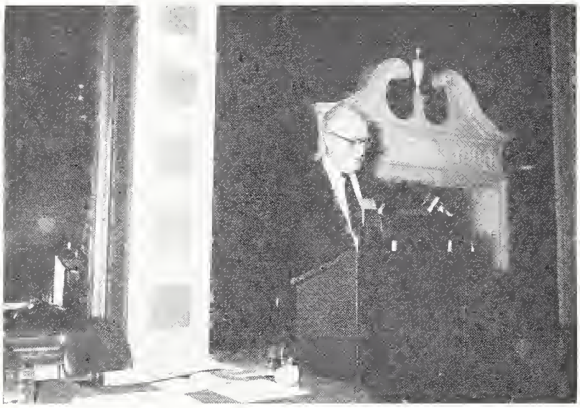
What the results of this national election will mean to us remains to be seen, but I think it is safe to say that it will not make life any easier for organized medicine. Our challenge to bring fresh ideas and new solutions to old problems is greater and more urgent than it has ever been before. We can no longer offer for these problems the same tired formulas as in the past, any more than we can treat patients today by the same methods used at the turn of the century. We need to do some new thinking and devise effective action.

If my tenure in office has had any success, it must be attributed to the Councilors, the committee members and the committee chairmen. The devoted and dedicated staff deserves special mention, for they work without stint to further the aims of organized medicine—at best a difficult task, at times almost impossible—particularly when the components of organized medicine find it difficult to decide just what the aims are.

I wish to give praise in particular to Tom O'Brien and Ray McIntyre, who consistently labor long hours with an enthusiasm that can be a model to us, the physicians they energetically serve.

Lemoine Skinner and his associates, too, have done yeoman's work in the field of public relations and public service. I give my heartfelt thanks to all of these men and hope that you truly appreciate their efforts in your behalf.

I shall not go into a full discussion of the work of the past year. This is available to you in your handbook, as the reports of the committees and the Council. I sincerely request that all of you participate in the work of the reference committees so that your wishes may be known.



Dr. Hampton opened the House of Delegates.

There are, however, a few matters which I would like to discuss with you because I think they are of exceptional importance.

The first of these is the Mills-Kerr Law, which, as you know, was enacted at the national level and now awaits implementation by the state legislatures.

This law has been endorsed by the A.M.A. which has asked that state and local societies do everything they can to get implementation by the states.

The Council's attitude on this matter is included in the report of the Committee on Aging and Medical Economics in the handbook. In brief, they recommend we support implementation by urging the legislature to appropriate an additional one and one half million dollars to continue hospital and nursing home care at present levels—further, they recommend that we reaffirm our position, taken in 1959, that physicians not be paid under the program—and finally, they suggest that a lien and recovery law be enacted to prevent abuse of the program.

I believe that the committees' recommendations are the minimum that can be advocated. I fully realize that some physicians are opposed to this law and apparently to any other which would increase the participation of the state or federal government in health care. It is my feeling, however, that the Mills-Kerr Law is about as little intervention as we can hope to get. It provides the states with the opportunity to operate their own programs. It permits the state legislatures to decide what the money shall be spent for—whether hospital care, nursing home care, home services, drugs or other things. The state can decide whether they will include the medically indigent or not—and so on.

The Mills-Kerr Law is not tied in with Social Security, and it does limit aid to those on the Old Age Assistance rolls and the medically indigent. I feel that we should attempt to get this law implemented in Missouri so that it can be given a fair trail.

This is only one aspect of the matter, however. The Mills-Kerr program deals only with people over age 65. Mr. Kennedy's program for compulsory medical coverage under Social Security—thus far—deals only with people over age 65. I am not in any way suggesting that we should lessen our resistance to the unfortunate Social Security approach, but we should take into account the fact that neither the Mills-Kerr program, nor Mr. Kennedy's proposals, provide for all people over 65—and that, as yet, there has been little mention of programs for all of the people under age 65.

The interest, nationally and locally, in programs for the aging, however, should give us pause—no matter whether we feel this concern is based on facts or not.

We still have the problem—the challenge—and, for a short time, the opportunity of providing private, voluntary programs to take care of the needs of those under 65, and the greater part of those over 65. As physicians we should concern ourselves with this problem and work out a mutually satisfactory method that will permit people in low and middle income groups to budget for their medical care.

This obviously should be worked out through voluntary health care plans, which are, as I see it, designed as groups of physicians and patients associated for mutual benefit—and do not represent third-party care as it is generally understood.

I am quite certain that the grievances and problems, real or imagined, that patients talk about would disappear if they could truly budget their medical costs—which they cannot do with certainty under many of the present plans. It behooves us to do some original thinking on this matter and devise a fresh approach which will meet the demands of our patients. The demand is there, whether we choose to acknowledge it or not. And we do not have a great deal of time.

I would like to comment now on a different, but related topic—namely, the public service program.

Last year the House of Delegates passed a resolution calling upon the Council to institute a program of public relations emphasizing the positive programs of medicine, with the provision that county societies be urged to institute advertising programs emphasizing the guarantee of physicians that medical care is available to all regardless of ability to pay.

A committee was immediately appointed. Its first effort was to sample physician opinion in various parts of the state to determine their willingness to participate in a program designed to publicize the fact that they would take care of patients for nothing if they were unable to pay.

The reaction of most of those contacted was less than enthusiastic. While doctors, by and large, were taking care of the problem privately they were not in favor of advertising this.

Concurrently, estimates were made of what it would cost the local societies to advertise their various programs. The figures are in your handbooks, but a very minimal program, in newspapers alone, would cost, statewide, in the neighborhood of $35,000 a year or more. I do not believe most of us realize the cost involved in advertising—for one minute of time on a St. Louis television station you pay between $300 and $400. In any case, it is obvious, I believe, that the cost of even a modest program of advertising would be prohibitive for most if not all local societies.

Another activity of the Committee was to investigate present indigent care provisions through a questionnaire to local societies. This pilot study made it clear there is much that can be done on a local level, with county government cooperation, to improve local arrangements for care of the indigent. I believe other such research projects must be carried on. It is vital that we know what the resources are, and the needs are—and who and where the people are who do not get adequate care—if there really are such people.

A realistic and humane program rests on such information. We must determine, if possible, who the people are who could get care, but do not. We must determine why they do not avail themselves of care if they need it. We must keep in mind that we cannot limit such a study to available physician care—although this to us is our primary responsibility. We must include the whole field of health care since we are inevitably made the scapegoats whether we have the responsibility or power to correct deficiencies in these other fields or not.

As a corollary to this, the Committee asked the Woman's Auxiliary to attempt to gather together a list of all the facilities for health care available at local, county and state levels, so that a handbook of medical facilities could be made available to each Missouri physician.

Mrs. Kelling, the president of the Auxiliary was as enthusiastic about the project as I, and with the cooperation of the women of the Auxiliary has made a pilot study in her own county area.

A project of this scope cannot be completed in a short time. It is my earnest hope that the coming administration will see fit to give full support to continuing the work. Once the information is available we can, as physicians, be certain that we can direct patients to adequate care which we perhaps cannot render ourselves. And we will have further data on which to base action programs to fill any needs that may become apparent.

Other programs have gone forward. The AMEF campaign, which Dr. James Murphy has worked on so diligently, is doing better. Yet both he and I feel we can improve it, and that every physician in the state should make some contribution to this fund.

The MSMA Student Loan Fund has been established and the Council has placed at the disposal of the committee a total of $50,000. Since the program started in May, 1960, we have been able to help 33 medical students with total loans of more than $19,000. Requests for loans for the fall semester are already coming in.

This program has been widely acclaimed and deserves to be enthusiastically supported. Steps are now being taken to form the MSMA Foundation to operate the fund as a nonprofit corporation empowered to receive donations or contributions from physicians and other sources. Every member of the MSMA will be a member of the Foundation, privileged to attend its annual meeting and elect the trustees and officers.

The preceptorship program has gone forward, as has the Honors Award program for medical students.

Every effort has been made, consistent with honesty and good taste, to increase the public's awareness of our efforts to improve health care, to render professional services to everyone in cases of emergency. We have constantly emphasized our efforts to assure adequate numbers of physicians and to encourage them to practice in the areas of greatest need—particularly in rural areas.

There has also been considerable time and energy devoted to increasing public recognition of our sincere interest in the welfare of aged citizens—not only their medical needs, but their physical, social and emotional needs as well.

As you know, in December the Council voted to discontinue the Public Service program as such and await further instructions from the House of Delegates. I know that you will want to consider carefully what should be done in this area.

I must say, however, that a public service program can only be worthwhile if there is present, working and documented a program that can be publicized. There must be formalized programs at the local and county levels. General statements that the people of Missouri can get adequate medical care regardless of ability to pay are not enough.

Furthermore, we must remember that every individual physician in Missouri holds the entire profession at his mercy. No amount of newspaper advertising can overcome a physician's refusal to make a night call—to react sympathetically to a patient's fears—to fail to adjust his fees to the patient's financial situation—to leave his patient without providing for his care when out of town.

We as physicians must face the hard realities of these facts as a group—just as readily as we face them in individual conversation. Never was it more apropos than in this instance—one bad apple will spoil the barrel.

Dr. Muether presented the President's Message.

I sometimes suspect we spend a lot of energy looking for an easy way out. This problem cannot be solved superficially—through advertising or pronouncements or resolutions. There is no easy way out. Our programs must be based on actions, and we must all, individually and together, locally, on the state level and nationally, put our effort to doing what is right and proper and effective.

I believe sincerely that the greatest single stumbling block to good public relations at this time is the matter of physicians' fees. I think it is high time that we determine some mechanism whereby the patient can truly budget for his medical costs. Make no mistake—the public will do so whether it pleases us or not.

With all the scientific advances—with all the miracle drugs—with all the wonders of medicine and science at our command, we still have not developed a mutually agreeable mechansim for the least important—so we have always said—aspect of our relationships with patients—namely the money.

We are in a sad state if we can produce excellent medical results but cannot find ways of distributing these results. Are we to be bogged down over the age-old problem of failure of distribution?

It is time we shook off the clinches of the past—the third party payment concept, for example. If a group of physicians meet and arrange a mutually satisfactory method of handling the money matters of medical practice with their patients—where is the third party?

By what logic do we reach the conclusion that we cannot, over-all, arrive at a fair fee for our services. This is merely a smoke screen thrown up by those who wish to drive the hardest bargain they can, whenever they can. How many physicians actually vary their fees from patient to patient? I have talked to many doctors and almost invariably I am told that they charge a regular set fee—and reduce it if the patient cannot pay because of his financial situation.

Why, then, do we blind ourselves to the obvious facts? It is known to all of us that 80 to 90 per cent of the physicians charge the same price for the same services as their colleagues in the same community.

It is late—so late. We must find a way to continue to render care to our patients, to continue to grow, and through research, become increasingly able.

At the same time, we must face the problems of the financing of medical care. Somehow a solution must be found, and to do this I am convinced that we must break out of the constrictions of the recent past and assume a new and unhampered position. It is up to you, in this House of Delegates, to take the first steps.

The Speaker referred the President's Message to the Reference Committee on Miscellaneous Affairs.

J. H. Summers, M.D., Lebanon, presented the Recommendations of the President-Elect.

RECOMMENDATIONS OF THE PRESIDENT-ELECT

Mr. Speaker, Members of the House of Delegates:

At the start of these brief remarks, I wish to say that I am very conscious that I follow in office a man to whom the Missouri State Medical Association and every Missouri doctor owes the recognition deserved by a job well done. For many years Ray Muether has served this Association well. His year as our President has been the fitting climax to his long and devoted service to the medical profession of Missouri.

Let me add at once that I have no illusion as to the part I shall play as your President, for I hold no sure answers to the many and complex problems that bear so pressingly today on the future of medicine. I can assure you only that I will work to the best of my ability to support our Association's continuing effort to find prudent and workable solutions to these problems—solutions in the common best interest of our patients and our profession.

I am humbly and deeply grateful for the honor you have given me. I shall do my best to measure up to it.

It is not my purpose in this talk to attempt to set out comprehensive recommendations detailing my views of what the Association's program should be in the coming year. I am confident that this House of Delegates will deliberate wisely and will set sound and carefully considered policies to guide us in the months ahead. On behalf of your officers and Council I pledge our best efforts to carry out the letter and the spirit of those policies.

I should like at this time to confine my remarks, first, to a few of the more important areas in which it will be the business of this House to make policy decisions. I shall then conclude with a general observation regarding what seem to me the basic and essential responsibilities of individual Association members in this period of critical difficulty for medicine.

As you deliberate on the question of the extent to which the federal Mills-Kerr legislation should be implemented in Missouri, I am confident you will give weight to the A.M.A.'s policy concern that the question of federal funds for the health needs of the aged—both those on public assistance rolls and the near needy—be provided on this state-level vendor basis rather than through the Social Security system. I am sure you will also give earnest consideration to the part our Association should play in urging the Congress to defeat any and all legislation of the Forand-King-Anderson type.

I call your particular attention to the details of MSMA's new student loan fund which are set out in your handbook. It is my feeling that this is one of the most constructive new programs ever undertaken by our Association. I earnestly hope that our newly created Missouri State Medical Foundation may in the future be generously supported not only by the Association itself, but by local societies in a position to do so, as well as by many hundreds of individual doctors. Nothing we can do will produce more good will throughout the whole state than our aid to promising young medical students.

We are indebted to Dean Vernon Wilson of the Missouri University Medical School for valuable advice and guidance in setting up this important new program. I should like to say further that our relations with the school have never been closer or more cordial. I hope the coming year may see us working together even more effectively in all the areas in which we have a common interest. Dean Wilson has been a faithful and welcome attender at meetings of the Council. We are indebted to him for his interest, his advice and his help.

The final specific matter on which I wish to comment briefly is the Public Service Program, about which Dr. Muether has already spoken so well and which is reviewed in full detail in your delegate's handbook.

The choice you have to make in this connection is not a simple one. I urge you all to think the problems through with care and to deliberate fully before making your policy decision.

For whatever they may be worth, here are some personal thoughts on the matter. It seems to me pretty clear that we cannot, as was originally contemplated, get into a major program of advertising, either on the state or local level. We cannot do it, first, because it costs too much. We ought not to do it, second, because I do not believe advertising, no matter how skillful, is going to do this particular job. Finally, I believe it would be unrealistic and unacceptable to many physicians simply to advertise a blanket public offer of guaranteed service and leave matters at that.

What could we expect from a resumption of the Public Service Program, along lines suggested in the handbook, within feasible cost limits and realistic program lines? That is the core of the question you have to decide.

It seems to me there is only one objective we could seek. That would be to encourage a pattern of organized medical effort at the local level to take the lead in encouraging the provision of local county funds for local health needs, the provision of needed local facilities for minimal and custodial care, provision of the program by doctors in the community through which they will work together to make certain that real needs are being met, and provision of information that will enable the local doctors intelligently to refer patients to facilities and services not available in the immediate locality. (In this last connection, the master Directory of the State's Health Resources, now being prepared by the Woman's Auxiliary, will be of great value.)

Dr. Summers gave the Recommendations of the President-Elect.

The question, then, boils down to this. Should MSMA extend its program to make it a regular Association function to help local societies take the lead in solving indigent care problems locally—with local funds and local resources? Should MSMA, further, build on this activity a broadened public relations program to let the public know what doctors are doing to see to it that all real needs are being realistically taken care of? How far should we go along such a line? How much ought we to spend on such a continuing effort? These are the questions on public service that will concern you during this session. Our answers to these questions will also bear directly on our long-term chances to forestall legislation of the Forand type.

As I come now to the conclusion of these few remarks, I have, as I noted earlier, one general observation to make.

It has been said before—and it will surely be said again—that the individual physician is, in the last analysis, the only person who can really do much for the public relations of the medical profession. Though the saying is old, I wish to emphasize it in two connections.

First, and obviously, it is the kind service and warm helpfulness a doctor gives to his patients and his community that create the image those patients and that community have of our profession. Each of us can improve himself here. Each of us has a plain practical reason for doing so.

But there is a second area in which the effectiveness of our program depends primarily on the individual physician. And this is the area of medical Association activity and program. Though we do have throughout Missouri many, many hundreds of doctors who are willing to give their time, energy and attention to the affairs of their local society and MSMA, it still remains true that too many doctors are content to pay their dues and let it go at that. It is in this area of need for greater personal dedication and interest on the part of each of us that I hope we may progress in the coming year.

At the same time, we should not neglect local community affairs. We can gain tremendously if we show an active interest in local problems and projects outside our own field of health. By working in the community with local government, schools, youth activities, our churches and other organizations, we show our interest and concern in the general problems of the public. When we show we are aware of these problems, and interested in helping with the solutions, perhaps the people, in turn, will become more aware of our problems and interested in helping solve them.

Within the Missouri State Medical Association, if all of us worked as faithfully as some of us do on committee assignments—if all of us knew and supported the elements of our MSMA program as some of us do—we should have gone a long way to guaranteeing the effectiveness of our program and toward influencing the broad attitudes and opinions of the public that are so critical for the practice of medicine today.

On the other hand, we are bound to fail in our aim to keep medical practice independent of government if we do not work together—and I mean all of us work—in demonstrating to our patients and the public that the organized medical profession is capable of taking the lead in fully and responsibly meeting the needs of every community. And it is at the community level—as well as the state—that this work needs to be done by each of our societies and every one of its members.

Abraham Lincoln is said to have observed that a man owes something of himself to any organization or group he belongs to. Surely this ought to be true of membership in the ranks of organized medicine at this time of historic social choice. Surely it ought to be true of every doctor in our state. I hope we can now work together to make it true—not only for medicine's sake, but for that of the people of Missouri.

The Speaker referred the Recommendations of the President-Elect to the Reference Committee on Reports of Officers.

Mrs. Jordan Kelling, Waverly, President of the Woman's Auxiliary to the Missouri State Medical Association, presented the following report to the House of Delegates.

REPORT OF THE WOMAN'S AUXILIARY

Mr. Speaker, Dr. Muether, Officers and Members of the House of Delegates of the Missouri State Medical Association:

It is a great honor and a pleasant duty to make this report to you in behalf of the Woman's Auxiliary. Our constitution states that our object shall be "to extend the aims of the Missouri State Medical Association which look to the protection of public health and to advancement of health education; to fulfill such functions as may be needed from it at medical meetings; and at all times to stimulate the spirit of cooperation and fellowship through the common bond of friendship."

We strive to erase some of the rough spots in your work by recruiting bright young people to enter careers related to the medical field, and, in the last two years, have extended our efforts to interesting highly qualified young men and women to enter the medical profession.

In many counties in our state there are future nurses clubs, and medical careers clubs, which have been organized by the auxiliaries. Such clubs are sponsored in many places by our organization, or receive aid in planning and programming. The schools welcome our aid in this service. Nurse scholarships are offered by many county groups. We distribute literature, and show films in the schools dealing with health careers.

As you are probably aware, for many years the Auxiliary has had a Student Loan Fund, and this year alone there have been two recipients of loans from the state Auxiliary.

At the urgent request of the American Medical Association this year that the auxiliaries give subscriptions to *Today's Health* to teachers in grade, high school and colleges, hundreds of these gift subscriptions were given by our counties. One county gave 495 such gifts. Comprehensive articles were being planned, especially on aging and care of the aged, by A.M.A., and the thinking was that the teachers could relay this information to their pupils, who, in their turn, would carry the information to their homes. The article in the March issue concerning intercollegiate debates the topic for all debates being, "Should the U. S. adopt compulsory health insurance?" is only one example of the merit of having *Today's Health* in the hands of the nation's educators.

Believing stoutly that the only way to keep the government from subsidizing the medical schools is by voluntary contribution to the schools, we work to support the American Medical Education Foundation, and, when all is counted, we expect to have made over $3,000 in our contributions this year.

Since mental health begins at home, we strive to first of all educate ourselves in this important field, and also to extend this education to the public. Some groups arrange for speakers on this subject for meetings which include other organizations. Volunteer service is given in many of our state institutions and hospitals by our members, and an educational program has been carried out extensively this year to inform our members of the needs in our state hospitals.

Mrs. Kelling, President of the Woman's Auxiliary, addressed the House of Delegates.

Our members have informed themselves through our programs of the ways and means of defending our well-being in the case of disaster or enemy attack through our Civil Defense Program. Again, these programs have extended beyond our own membership, because, not only does it work for better public relations between the public and the medical profession to have the Auxiliary working to promote these aims, but it is a charitable thing to do.

Safety at home and on the highway, safety for senior citizens in the home, fire prevention, an educational campaign to cut down the alarming number of accidental poisoning cases among small children, and, this year, because boating, water skiing and swimming are increasingly popular and accident rate going higher, a water safety program is given a great deal of our attention. As in the other cases, we take these educational programs to the public.

And then, too, we must admit we have a good time being together.

Since last September, great concentration has been placed in formulating plans for carrying out the part the county auxiliaries will play in the compiling of the Health Resources Directory for the State of Missouri. This is a service which the Missouri State Medical Association has asked its Auxiliary to do. A pilot survey was completed in Lafayette-Ray Counties, and these findings used to assist in planning the endeavor for the whole state. The Auxiliary begs the ideas and inspirations of the county medical societies in carrying out this task, and, especially do we implore the cooperation of those counties which have no organized auxiliaries to furnish ideas as to how this can be carried out in those counties in order to make this directory a state-wide service for all physicians.

I would be remiss in this report if I did not extend heartfelt thanks to the Missouri State Medical Association for so many things which have contributed to our successful carrying out of the Auxiliary program.

The *Quarterly Bulletin*, our official publication which carries our story and news of our members to our 1,733 members is financed by MSMA, and there is no way to begin to express our thanks for this contribution. For the first time, thanks to MSMA, we have a directory of our members which is printed in a special section in the MSMA Directory which is published in mid-July. This has been such a valuable thing that I wonder how officers of the Auxiliary ever functioned before we had this directory.

We wish, also, to thank you for providing so handsomely for our convention now in session at the Hotel President.

Our thanks go out most sincerely to Dr. Muether and the Officers of MSMA; to Dr. Louis H. Kohler and Dr. Stanley S. Peterson who, along with Dr. Muether, have been our Medical Advisory Councilors this year; and to the staff at the state office who have always been cooperative and courteous, considering no question or request for information and help too trivial for their consideration.

Please accept the wishes of the Woman's Auxiliary to you for a very successful Annual Meeting.

The report of the Secretary, John I. Matthews, M.D., Jefferson City, follows:

REPORT OF THE SECRETARY

On December 31, 1960, the official membership of the Association was as follows:

Number of Members, January 1, 1960	3,770
New Members	136
Members Reinstated	6
Total	3,912
Members Dropped	12

Members Deceased	71
Members Transferred	42
Members Resigned	5
Total	130
Number of Members, December 31, 1960	3,782

The Committee on Nominations, which is appointed by the President from the House of Delegates, must submit nominations for the following offices:

Three Vice Presidents to fill the expired terms of Robert B. Bassett, St. Louis: Thomas S. Fleming, Moberly, and Claude J. Hunt, Kansas City.

Two Delegates and corresponding alternates to the American Medical Association to fill the vacancies created by the expiration on December 31, 1961, of the terms of A. W. Neilson, St. Louis, alternate, Robert Kelley, St. Louis; Richard H. Kiene, Kansas City, alternate, Rolla B. Wray, Nevada.

The terms (two years) of the Councilors of the even numbered districts expire this year:

J. J. Wimp, Kirksville, Second District; Paul R. Whitener, St. Louis County, Fourth District; O. B. Barger, Harrisonville, Sixth District; W. W. Tillman, Springfield, Eighth District; Ben M. Bull, Ironton, Tenth District. In addition, the term (one year) of E. A. Stricker, St. James, Ninth District, appointed by the Council to serve until the next session, expires at this meeting. Delegates from these districts shall meet during the meeting, prior to the last day, and elect the Councilor for their District. The election shall be certified to the House of Delegates on a prescribed form which will be furnished. Lists of delegates from the various districts will be available to the Councilors.

The entire session will be held in Hotel Muehlebach. The House of Delegates will hold its first session on Sunday, March 19, at 1:30 p.m. in the Colonial Ball Room. Reference committees will meet in committee rooms in the hotel following the session. The second session of the House of Delegates will convene at 4:00 p.m. on Monday, March 20, in the Colonial Room. The final session of the House, a breakfast meeting, will be in the Trianon Room of the hotel at 7:30 a.m. on Wednesday, March 22.

Registration will be open on Sunday, March 19, from 12:30 p.m. to 3:30 p.m.; on Monday and Tuesday, from 8:00 a.m. to 5:00 p.m., and on Wednesday, March 22, from 7:30 a.m. to 12:00 noon. Registration will be in the Grand Ball Room, Hotel Muehlebach.

JOHN I. MATTHEWS, Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Executive Secretary, Mr. Tom R. O'Brien, follows:

REPORT OF THE EXECUTIVE SECRETARY

The personnel of the office, Mr. Ray McIntyre, Miss Helen Penn, Mrs. Bertha Thomas, Mrs. Mary Laskiwitz, Mrs. Shirley Volk and Miss Faith Crossman are most deserving of the thanks of the members for devoted service to the Association. In addition, our public relations consultant, Mr. Lemoine Skinner, and his staff members, Jordan Singleton and Gene Lunn, provided invaluable assistance on the many occasions when called upon to help with Association projects. I wish to extend my sincere thanks to all of them for their help to me.

The reports of the Council, Standing and Special Committees describe the various activities of the Association.

The officers, committee members and other members have given freely of their time to consider and act upon problems of interest to all members. I wish to thank them for their help to me, the staff and the Association.

TOM R. O'BRIEN, Executive Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Treasurer, Charles R. Doyle, M.D., St. Louis, follows:

REPORT OF THE TREASURER

The report of the Treasurer is covered in the Financial Statement which appeared in the March issue of MISSOURI MEDICINE. Also the Financial Statement and the budget were sent to all county medical societies and to all delegates in the Delegates' Handbook conforming to the by-laws that these shall be received by county medical societies 30 days prior to the Annual Session. Since the societies have had the report and it appears in MISSOURI MEDICINE prior to the session, it is not repeated in these reports.

CHARLES R. DOYLE, Treasurer.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Scientific and Postgraduate Work, John I. Matthews, M.D., Jefferson City, Chairman, follows:

REPORT OF THE COMMITTEE ON SCIENTIFIC AND POSTGRADUATE WORK

An important part of the Committee's work is the arranging of the program for the Annual Session. In an effort to improve the programs and present to the members the type of program they desire, the Committee conducted a survey following the 1960 Annual Session, asking those that did attend what they found most valuable and acceptable, and those that did not attend what would attract them to attend the session.

Among the principal requests for the program were panel presentations, refresher courses, medical economic subjects, medico-legal presentations and more specialty group presentations. The 1961 program has been planned around these requests and it is the Committee's sincere hope that the program will meet with the approval of the membership.

Fellowship and meeting with friends was mentioned in many of the survey returns and several features have been added to the schedule to give these possibilities.

The Committee has worked closely with the Education Committee of the Missouri Academy of General Practice and with component county medical society committees in promoting scientific programs for many county and joint county medical society meetings over the state during the last year. Academy members, by attending such programs in which the Academy Education Committee has a good part in developing the program, receive Category I Postgraduate Credit toward Academy membership requirements. This procedure promotes better attendance at county society meetings and therefore everybody gains.

The Postgraduate Medical Education Committee of the University of Missouri School of Medicine has been most helpful in providing speakers from the Missouri

University Medical School faculty to meet many of these medical society program requests.

The Committee has worked with the Academy Education Committee and the St. Louis University School of Medicine Cardiovascular Section in presenting a number of special panel discussions on heart disease before a number of medical society meetings in rural Missouri.

The Committee feels that Missouri physicians have had many opportunities to attend easily accessible, interesting and practical scientific postgraduate and refresher programs over the state this last year. In addition to the many good programs of county medical societies, other postgraduate and refresher programs were made available over the state through medical schools' postgraduate departments, through the Missouri Academy of General Practice and its local chapters sponsored programs, through various clinical conferences such as the Kansas City Southwest Clinics; the Southeast Missouri Cancer Conference sponsored by the Cape Girardeau County Medical Society; the Ozarks Empire Cancer Conference sponsored by the Greene County Medical Society; the two day Spring Clinical Conference at the University of Missouri Medical Center and the fall M.D. Day at the University of Missouri; the two day winter Chest Symposium at the State Sanatorium in Mt. Vernon; and through many refresher and postgraduate programs arranged by various specialty organizations.

The Committee, through the headquarters office, is continuing its efforts to reduce to a minimum duplications and conflicts in medical meetings and programs over the state by working closely with other organizations which hold scientific meetings.

The Committee wishes to take this opportunity to express its thanks and appreciation to all of those physicians who have appeared on the many scientific postgraduate programs held over Missouri during the past year.

JOHN I. MATTHEWS, Chairman,
M. PINSON NEAL,
JOHN A. GROWDON,
JAMES G. JANNEY, JR.,
GERALD L. MILLER,
JOHN C. NUETZEL,
MELVIN C. KASTEN,
WYETH HAMLIN,
KENNETH K. KEOWN,
ROBERT W. SMITH.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Publication, Charles R. Doyle, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLICATION

The 57th volume of MISSOURI MEDICINE was completed with the December 1960 issue. During 1960 there were published 42 scientific articles, one clinical pathologic conference, five case reports, 16 special articles, 18 editorials, 11 President's Messages, 11 Washington, 11 Across Missouri, 10 Missouri Academy of General Practice, 11 Woman's Auxiliary, 11 Ramblings of the Field Secretary, 262 news items, 107 Councilor District News, 152 new members, 73 deaths, 33 From the Medical Schools, four organization activities articles, three reports of the Council, three tuberculosis abstracts, 11 Curiosa et Trivia, 11 Capsule Clinics, 11 Missouri Medicine in Review, 76 books received, 10 book reviews, 31 miscellaneous articles, minutes of the Annual Session, four rosters, one financial statement, three correspondence and one index. There were 802 pages of advertising, 758 pages of reading material and 110 pages of inserts.

Advertising in MISSOURI MEDICINE from January 1, 1960, to December 31, 1960, earned $68,212.25. Subscriptions of nonmembers amounted to $232.61, making $68,444.86 earned by the publication. The cost of production (printing and illustrations) was $42,804.57.

CHARLES R. DOYLE, Chairman,
RICHARD H. KIENE,
R. O. MUETHER,
C. G. STAUFFACHER,
BEN M. BULL.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Defense, C. E. Hyndman, M.D., St. Louis, follows:

REPORT OF THE COMMITTEE ON DEFENSE

The Committee on Defense has had no case reported to it during the year and has had no meeting of the Committee.

CHARLES E. HYNDMAN, Chairman,
ROLAND S. KIEFFER,
W. W. GIST,
L. P. FORGRAVE,
RONALD F. ELKIN.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Public Policy and Public Relations, Ben M. Bull, M.D., Ironton, follows:

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND PUBLIC RELATIONS

Because of the extensive and outstanding activity of the Special Service Committee of the Council, the Committee on Public Policy and Public Relations has not met formally, its members serving in an auxiliary way when called upon.

The Committee feels that the Public Service Committee has done an excellent piece of work under very difficult circumstances and offer our sincere congratulations to the Chairman and members of the Committee.

BEN M. BULL, Chairman,
C. C. COHRS,
R. J. CRIDER,
ROLLA B. WRAY,
FLOYD C. ATWELL,
C. B. SCHOEBERL,
H. W. CARRINGTON,
E. D. IMES,
R. R. LYLE.

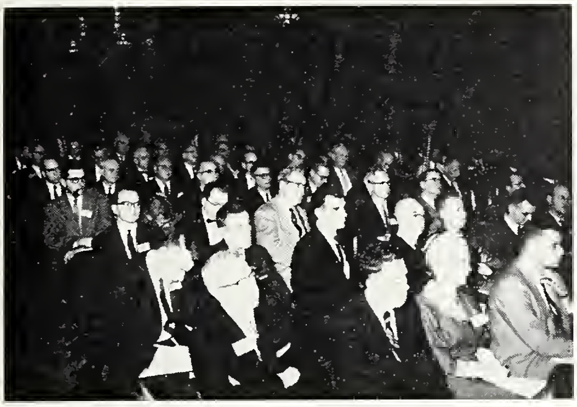
The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Medical Education and Hospitals, Kenneth Glover, M.D., Mount Vernon, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

The Committee met in joint session with the Committee on Rural Medical Service of the State Association on Sunday, February 12, 1961, in Jefferson City.

Dr. Vernon E. Wilson, Dean of the University of Missouri Medical School was present to discuss matters concerning the operation of the Medical Center which were of special interest to the Committees. It is recognized that the ultimate aims of both the practicing physician and the school are the same, namely, to provide good medical care to the citizens of Missouri. To accomplish this, continuing improvement in communications and cooperation between the practicing physicians over Missouri and the State Medical School must be maintained. Meetings of the two Committees with Dr. Wilson serve as one excellent avenue of effecting a mutually beneficial relationship toward the goal of providing more good medical care to the people in this state. The Committees are pleased that Dean Wilson is soliciting our ideas and suggestions on various matters relating to the operation of the University of Missouri Medical School. The Committees are anxious and ready to be of help to him whenever they can.



The House of Delegates was well attended.

The Committee has continued its assistance to the University of Missouri Medical School in the preceptorship training program for senior medical students. Names of physicians over the state, practicing in towns of approximately 5,000 population or under who have indicated a desire to serve as preceptors for the specified six weeks periods, are suggested from time to time, to the Dean of the Medical School. The final selection of the preceptors is made by the Medical School.

Senior medical students at Missouri University may elect this six weeks preceptorship training at specified times during the period July 1 to June 1 of their senior years. For the current senior year a total of twelve have elected to take the preceptorship training. Missouri physicians serving as preceptors for the senior medical students are: Drs. William and George Richardson, Union; Dr. K. S. Latham, California; Drs. Paul Roberts and Charles Worley, Sweet Springs; Dr. Stephen Parks, Bloomfield; Dr. A. E. Spelman, Smithville; Dr. Charles H. Price, Cassville; Dr. Doyle C. McCraw and Ben Koon, Bolivar. There are five preceptors yet to be secured for the last six weeks period, April 12 to May 25, 1961.

The Committee takes this opportunity to sincerely thank all of the physicians who have served as preceptors. The Committee feels that this is a real service to medical education in Missouri.

The Committee also takes this opportunity to congratulate the Council of the Missouri State Medical Association on its forward step in establishing and putting into operation a Medical Student Loan Fund. We heartily endorse this project.

Kenneth Glover, Chairman,
William A. Knight, Jr.,
George J. L. Wulff,
Doyle C. McCraw,
Ralph Perry.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Medical Economics, A. P. Rowlette, M.D., Moberly, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The Committee has had one meeting during the last year and that was a combined meeting with the Committee on Aging. The report of that meeting which dealt with study of the Kerr-Mills bill and its possible implementation in Missouri together with recommendations is reported under the heading "Report of the Committee on Aging."

The Committee on Medical Economics again wishes to present information for members as to the extent of Blue Cross-Blue Shield coverage in Missouri in 1960.

KANSAS CITY BLUE SHIELD

Membership, December 31, 1959	432,324
Membership, December 31, 1960	447,770
Reserve per agreement	$15.80
Reserve per participant	$ 5.97
Number of cases paid	207,452
Amount paid during the year	$5,681,065.88

ST. LOUIS BLUE SHIELD

Membership, December 31, 1959	544,733
Membership, December 31, 1960	598,889
Reserve per agreement	$22.02
Reserve per participant	$ 8.60
Number of cases paid	128,640
Amount paid during the year	$8,094,606.00

ST. LOUIS BLUE CROSS

Membership, December 31, 1959	904,992
Membership, December 31, 1960	931,160
Reserve per agreement, December 31, 1961	$20.07
Reserve per participant	$ 7.84
Number of cases	178,080
Number of days	1,108,789
Average day stay per case	7.87
Amount paid during the year	$22,461,482.00

KANSAS CITY BLUE CROSS

Membership, December 31, 1959	469,061
Membership, December 31, 1960	481,259
Reserve per agreement	$28.23
Reserve per participant	$10.65
Number of cases hospitalized	95,639
Number of days hospitalized	577,174
Average stay per case	7.69
Amount paid during the year	$11,906,027.51

A. P. Rowlette, Chairman,
George L. Hawkins,
John R. Forgrave,
Martin Hunter,
G. W. Winn.

(Figures in the printed report were incorrect and appear corrected in these proceedings.)

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Cancer, Marvin L. Napper, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CANCER

The Committee did not meet during 1960. A mail poll was taken of the members of the Committee regarding special examination forms for cancer detection. These forms, developed by the Committee a few years ago, contained several "optional" items because it was thought that they might be difficult to obtain in some areas of the state. These "optional" items are now readily available to all physicians, therefore it was recommended that the forms be revised appropriately. All members agreed that the forms should be so changed.

Marvin L. Napper, Chairman,
John J. Modlin,
George A. Carroll,
E. Kip Robinson,
Joseph L. Fisher,
John E. Lamy,
Charles E. Lockhart,
Henry C. Allen,
James R. McVay, Jr.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Mental Health, James N. Haddock, M.D., Clayton, Chairman, follows:

REPORT OF THE COMMITTEE ON MENTAL HEALTH

The Committee on Mental Health met twice during the year, April 10 and October 16. On each occasion the principal interest of the Committee centered on plans to improve Missouri's state mental hospital system. At the first meeting, Dr. Addison Duval, Director of the Division of Mental Diseases, gave a broad outline of the objectives of the Division in improving the state hospital system for the care of the mentally ill as well as providing for a program of prevention. In the second meeting, Dr. Duval gave more specific attention to proposed legislation for the coming two years.

The bulk of the program consists of measures to improve the facilities for care and treatment of the mentally ill and the mentally retarded in Missouri's five state mental hospitals and two state schools for the retarded. That the main emphasis should be on improving and increasing the professional staff, rather than enlarging the physical facilities was heartily approved by the Committee. The coordination and leadership offered by the new central office of the State Division of Mental Diseases was impressively noted by the Committee.

Several recommendations to improve administrative procedures within the Division were approved. These included legislation to allow transfer of non-resident patients to the proper state, to allow return of children to the training schools when no longer in need of mental hospital care, to allow return of sex offenders who are untreatable and not in need of mental hospital care to the court of origin, to give the hospital superintendent and the court involved joint responsibility when discharge of the criminally insane from the hospital is contemplated, to designate each state hospital by the town of its location rather than by number, and to change the name of the Division of Mental Diseases to the Division of Mental Health.

Other programs tentatively planned by the Division but not as imminent of fulfilment were considered. One is to abolish the system of "county patients" as antiquated. The Committee withheld action on this proposal since it is unlikely that it will be introduced immediately. Another contemplated program is to allow local communities and the state to develop all-purpose mental health clinics on a fifty-fifty matching basis, but with the state supervising the standards of operation. Again, the Committee took no action because this program will probably not be immediately proposed for adoption. Instead, it was pointed out that these clinics would need to be carefully planned so that they do not duplicate functions already filled by the private psychiatrist, by the general practitioner, and by the existing preventive health facilities of the State Division of Health. The need to preserve local and private responsibility as much as possible in any program of medical care was emphasized.

James N. Haddock, Chairman,
Robert J. Mueller,
George W. Forman,
Henry V. Guhleman,
D. R. Edwards,
Alex L. Brown,
Frank M. Grogan,
Albert Preston,
N. Venay Bolin,
James A. Weiss.

The Committee reported to the Council on May 21-22 and the report was accepted. The second report of the Committee was given to the Council on December 10-11 and was accepted with the recommendation that the Committee carefully examine the finally drafted legislation to the end that patients be referred to community mental health clinics only on referral of physicians.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Maternal Welfare, James E. Keeler, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON MATERNAL WELFARE

The Committee on Maternal Welfare held three meetings during 1960 and 1961. The meetings were held at the Missouri Hotel in Jefferson City on May 15, 1960; September 18, 1960; and January 8, 1961. The actions and recommendations of the Committee for the year are summarized.

BIRTH CERTIFICATE

In the report of the Committee for last year it was noted that a suggested revised birth certificate was presented to the Committee. During the year this birth certificate was studied by various groups in Kansas City, St. Louis and the out-state areas, and extensive suggestions for revision were made, which were accepted by the Division of Health. However, at the last meeting of the Committee in January, the Division of Health indicated that there seemed to be no urgent desire at the present time on the part of their office for the changes proposed. Therefore, the Committee voted to table consideration of changes in the birth certificate for the present time.

JOINT MEETING WITH DIVISION OF HEALTH AND OSTEOPATHS

With the permission of the Council of the Missouri State Medical Association, two meetings were held with osteopathic physicians during the year under the sponsorship of the Division of Health represented by Dr. Hardwicke. These were held mainly to permit the osteopathic physicians to set up a maternal mortality review committee similar to the ones already functioning in the state and to provide for an interchange of information so that the maternal welfare picture in the state as a whole could be brought to the attention of the Committee.

The osteopathic association representatives pointed out that they had not to date progressed far in maternal welfare committee activities but were anxious to set up such an activity and asked for the right to consult with us over the problems arising. There is hope that in the future these meetings will lead to comprehensive reports of maternal welfare in the State of Missouri as a whole.

In line with this it was voted to change the fiscal year for reporting maternal death studies to run from July 1 to June 30, which will make coordination of the studies of our Committee more readily available.

The Committee on Maternal Welfare held a luncheon meeting.

EXPENSES OF COMMITTEE

During the year a request was made to the Council to be included in the budget for the following year, in the amount of $500 for secretarial expenses in connection with the work of the Committee in its study of maternal mortality. This budget addition was graciously granted by the Council and it was decided that this money would be paid annually on detailed vouchers submitted by the secretaries of each local group.

REPRINTS OF ANNUAL REPORT

It was called to the attention of the Committee that there are increasing requests for copies of the Committee's annual report from other state maternal welfare committees. These states are making their reports available, therefore, the Committee requested that they be allowed 50 reprints of the annual report for the year 1960, which is printed in Missouri Medicine, for distribution to other states upon request.

LEGISLATION

Recently enacted legislation in California which makes all records and interviews, written reports and statements procured by state departments or by any other person, agency, organization, acting jointly with the state department in connection with special morbidity and mortality reports completely confidential was discussed, and the California legislation was referred to the MSMA attorneys for study as to its feasibility in this state.

AVAILABILITY OF PATHOLOGISTS

In spite of the cooperation of the Missouri Society of Pathologists in agreeing to do postmortem studies in outlying communities where pathologists were not available, it was pointed out that insufficient publicity had been given to this availability and that also no central method of requesting this service had been set up. The Committee requested the chairman to discuss this matter with the Missouri Society of Pathologists to see what definite arrangements could be made and which then could be published in Missouri Medicine so that all would be able to avail themselves of this service.

MATERNAL MORTALITY STUDIES

Throughout the year the subcommittees of the Committee on Maternal Welfare conducted maternal mortality studies in the eastern and western halves of the state. The statistics from this study will be collated and presented at the annual session luncheon to be held March 20, 1961, in conjunction with the meeting of the Missouri State Medical Association in Kansas City, Missouri.

CASE REPORTS

The forms for case reports on maternal mortality for publication in Missouri Medicine were presented to the Committee and were approved. Further reports to be submitted to Missouri Medicine are currently in preparation and should begin appearing in Missouri Medicine in the near future.

James E. Keeler, Chairman,
William B. See,
E. E. Wadlow,
Jos. M. Krebs,
Irwin T. Craig,
P. V. Siegel,
H. C. Willumsen,
A. C. Trueblood,
Paul E. Kratz,
J. J. Wimp,
MacDonald Bonebrake,
E. G. Hamilton,
A. B. Sinclair.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Infant and Child Care, E. J. Schwartz, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON INFANT AND CHILD CARE

The Committee met at the Missouri Hotel, Jefferson City, November 20, with E. J. Schwartz, M.D., Springfield, Chairman, presiding. Those present were Drs. Schwartz; Daniel B. Landau, Hannibal; R. J. LaDriere, St. Louis; Guy N. Magness, University City; Clement E. Brooke, Columbia; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau, of the Committee; Dr. J. H. Summers, Lebanon; Drs. H. M. Hardwicke, W. C.

Meinershagen, L. M. Garner, E. A. Belden, Jefferson City, from the Division of Health; Messrs. Raymond Roberts and Homer Bolen, Jefferson City, of the Department of Education; Mr. Ray McIntyre and Miss Helen Penn, St. Louis.

LEGISLATION ON IMMUNIZATION

Legislation on immunization was discussed in general, it being pointed out that pre-school immunization was of great importance with the responsibility resting principally with the parent. It was pointed out that legislation making later immunization compulsory might encourage early immunizations.

PROPOSED BILL

The following proposed legislation, sponsored by the Missouri Junior Chamber of Commerce, was presented:

An Act
Proposed by the Missouri Junior Chamber of Commerce

Relating to the powers of the State Department of Public Health: Providing for the Immunization of School Children: Providing Exemptions: Providing Penalties: and Repealing R.S. 1939 § 10341.

Be It Enacted by the Legislature of the State of Missouri:

Section 1. Immunization Regulations. The Department of Public Health and Welfare shall, after consultation with the Department of Education, promulgate rules and regulations governing the immunization against poliomyelitis, smallpox, and diphtheria, to be required of children attending public, private, parochial or parish schools. The immunizations required and the manner and frequency of their administration shall conform to recognized standards of medical practice. The Department of Public Health and Welfare shall supervise and secure the enforcement of the required immunization program.

Section 2. Unlawful to Attend School Unimmunized—Unlawful to Refuse to Permit Immunization. It is unlawful for any student to attend school for longer than one month unless he has been immunized, as required under the rules and regulations of the Department of Public Health and Welfare, and can provide satisfactory evidence of such immunization. Provided that, if within the month, he produces satisfactory evidence of having begun the process of immunization, he may continue to attend school as long as the immunization process is being accomplished in the prescribed manner. It is unlawful for any parent or guardian to refuse or neglect to have his child immunized, as required by this section, unless the child is properly exempted.

Section 3. Exemption From Immunization. Any minor child through his parent or guardian may file with the health authority charged with the duty of enforcing the immunization laws the certificate of a duly licensed physician stating that the physical condition of the child is such that immunization would seriously endanger the life or health of the child; or upon affivadits from an officer of a recognized religious denomination that such child's parents or guardians are bona fide members of a denomination whose religious teaching requires reliance upon prayer or spiritual means alone for healing. Upon filing of such certificate, the child is exempt from the legal requirement of immunization for a period not to exceed nine months, on the basis of any one certificate.

Section 4. Superintendent—Duty to Report. It is the duty of each school superintendent, whether of a public, private, parochial or parish school, to cause to be prepared a record showing the immunization status of every child enrolled in or attending a school under his jurisdiction. The name of any parent or guardian who neglects or refuses to permit a non-exempted child to be immunized against diseases as required by the rules and regulations promulgated hereunder shall be reported by the school superintendent to the Department of Public Health and Welfare and the prosecuting attorney or circuit attorney of the county in which the school is located within thirty-five days after the child is enrolled or begins attending.

Section 5. Who May Immunize—Who Must Pay. The immunization required may be done by any duly licensed physician or by someone under his direction. If the parent or guardian is unable to pay, the child shall be immunized at public expense in a manner to be determined by the Department of Public Health and Welfare and the school superintendent.

Section 6. Source of Funds. Funds for the administration of this act and for the purchase of vaccines for children of families unable to afford them will be appropriated to the Division of Health from general revenue.

Section 7. Penalty. Violation of any provisions relating to the immunization of school children is a misdemeanor.

LEGAL REPORT

Dr. Schwartz reported that the proposed bill had been studied by attorneys for the Association and the following report was presented:

Proposed Immunization Bill of Junior Chamber of Commerce.

From an examination of a proposed bill by the Missouri Junior Chamber of Commerce, I would like to make the following observations:

Title. The title to the proposed bill repeals R.S. 1939 Sec. 10341, which should more properly be referred to as R.S.Mo. 1949 163.360, the present identification of the statute. This statute deals with a different subject matter than the title, in that it deals with school attendance while afflicted with any contagious or infectious disease. This statute is needed in view of the compulsory school attendance section R.S.Mo. 164.010, and should not be repealed. If it is repealed parents of children with infectious and contagious diseases could send such children to school; in fact, the attendance law would require them to.

Enacting Clause. The enacting clause of the bill is improper.

Section 1. Section 1 and the following sections have certain titles to the section which are improper draftsmanship. This section would place the authority for promulgating rules and regulations in the Department of Public Health and Welfare. This properly should be in the Division of Health. By setting out poliomyelitis, smallpox and diphtheria, any other contagious or infectious diseases would be excluded. The requirement extends to public, private, parochial or parish schools. It is questionable whether this legislation should cover private schools as they do not come under any regular state enforcement or regulation. The question of "recognized standards of medical practice" is one about which there might be much confusion.

Section 2. The question of "satisfactory evidence of such immunization" should be spelled out.

Section 3. The words "immunization would seriously endanger" might give rise to questionable interpretation; the exemption under "recognized religious denominations" gives rise to many problems. It is understandable that, to lessen opposition, exemption might be desired for those who do not believe in immunization, but if an immunization law is desired and is to be effective, it should apply to all who attend schools and I think would come under authority of the general police powers of a legislature.

Section 4. This section deals with the reporting and the keeping of a record of those refusing to permit compliance with the act and the first stage of the prosecution of such. It does not fix the responsibility of enforcement upon the state division.

Section 5. This section does not take into consideration proper requirement for private practicing physicians nor does it define those "unable to pay." It does not properly place responsibility for either determination or enforcement; it would leave considerable doubt as to procedures.

Section 6. This is a statement that funds should be appropriated from general revenue, and would eliminate by statute the use of federal participating funds, if such were available, for that purpose.

If immunization of school children is a desirable program, it would perhaps be better to have a bill having more teeth in it and made applicable to all children attending public schools.

Under the police powers of the state, it could be made applicable to all schools; but due to other statutes dealing with the public schools, it would perhaps be best to have two bills, one applying to private schools, the other applying to public schools. The management, organization and control of private schools is not governed by statute, except in rare instances; and statutes dealing with such should not be confused with statutes dealing with public schools. There is involved in this type of legislation a question of constitutionality if it excludes some and does not apply to all. The legislation is either good or bad as a health measure. If it is good, then its fullest benefits will come from a rigid application to all those attending.

DISCUSSION

In discussion it was brought out that there might have to be exclusions in the bill for religious beliefs, although in some states this is not done; the proper placing of policing powers in the bill; whether immunization reports should go to the Division of Health or the Department of Education; the need for a long-range educational program to promote early immunizations by family physicians in connection with such legislation; the use of present law which allows suspension of a pupil "if he or she deviates from normal"; the shortcomings of mass immunizations; the need for some plan whereby children below school age would have immunizations; whether or not the proposed law is a public health function; the help that P.T.A. organizations and women's clubs can give to an educational program.

ACTION

On motion of Dr. Kinder it was voted that the Committee go on record as favoring such legislation on immunizations as proposed by the Junior Chamber of Commerce but with modifications as brought out in the analysis by MSMA legal counsel and at the same time expressing the feeling that these immunizations should be at an earlier age. Also, it was felt the Junior Chamber might benefit by studying other states' laws pertaining to immunizations and their experiences.

Members of the Department of Education and the Division of Health, who were present, expressed agreement with the motion.

IMMUNIZATION LEVELS

Dr. Belden presented charts showing results of immunization surveys of first grade children in 12 counties which were conducted in the spring of 1959 by querying parents of first graders, and approximate levels of immunization coverage of pre-school children, conducted by household interviews in the fall of 1959 in Jefferson County, five areas in Kansas City and nine areas in St. Louis County. He pointed out that epidemics are more likely to occur where immunization levels are low. He called attention to the lower level of immunizations under 2 years of age as compared to those age 6 or 7 and stressed the importance of getting the immunizations started earlier to protect this most susceptible age group.

TUBERCULOSIS TESTING IN SCHOOLS

Dr. Meinershagen explained that tuberculosis case finding by mobile unit had been discontinued and reported on the pilot case finding study conducted by the Division of Health with cooperation of the medical society in Newton County. This was done by Mantoux test. He explained that it was tied in with school certification and that 49 schools received certification which indicated that 80 to 95 per cent of school children and 100 per cent of school personnel had been checked. He reported that six cases of tuberculosis had been found and that 15 suspects were still under study. He said that McDonald, Randolph and Macon counties were now conducting surveys and said that it is hoped that more counties will do this. He said that P.T.A. organizations and local TB societies were interested and might spearhead the work in other counties.

DISCUSSION

In discussion, the Patch and Mantoux tests were discussed in regard to schools and the private physicians' office; the efficiency of mass testing; the possibility of getting more physicians to test routinely in their offices; the general health education value of such programs.

ACTION

On motion of Dr. Magness, it was voted that the committee accept the report of the work done in Newton County with appreciation and recommend that a letter go to county society presidents, or chairman of child health committee in counties which have such a committee, calling attention to this work and recommending and urging that consideration of a similar type case finding program be carried out in their counties and also recommending that physicians be encouraged to do testing in their offices. It was recommended that a pamphlet, "School Certification Program for Tuberculosis Control," explaining a tuberculin testing program for schools, go with the letter.

IMMUNIZATION OF CHILDREN

Dr. Schwartz asked that all members of the Committee study the situation on immunization of children in their own communities and study possibilities of improving it.

SCHOOL HEALTH PLAN OF ST. LOUIS COUNTY

Dr. Magness explained briefly a St. Louis County School Health Program which has recently gotten under way. This was developed by the St. Louis County Medical Society in cooperation with the St. Louis County Health Department and the school administrators of the county. He said that he would report to the Committee later in more detail.

E. J. Schwartz, Chairman,
Daniel B. Landau,
H. E. Petersen,
R. J. LaDriere,
Guy N. Magness,
Clement E. Brooke,
James J. Pascoe,
Jack N. Wiles,
James A. Kinder,
S. F. Cockerell.

The report of this Committee was made to the Council at the December 10-11, 1960, meeting and was approved.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Health and Public Instruction, J. R. McDaniel, M.D., St. Joseph, Chairman, follows:

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

The Committee is pleased to report an increasing activity, and particularly, during this last year, on the part of county medical societies in sponsoring joint meetings with other professional groups. Special programs of broad interest have been arranged in conjunction with appropriate social festivities at these meetings. The joint sessions have included meetings with lawyers, dentists, pharmacists, hospital personnel, representatives of drug companies, office secretaries and assistants and Woman's Auxiliaries to the medical societies. In some instances, medical society members have invited lay friends as their guests to some special meeting of the society. This type of medical society activity has fine public relations, as well as health education, promotional values.

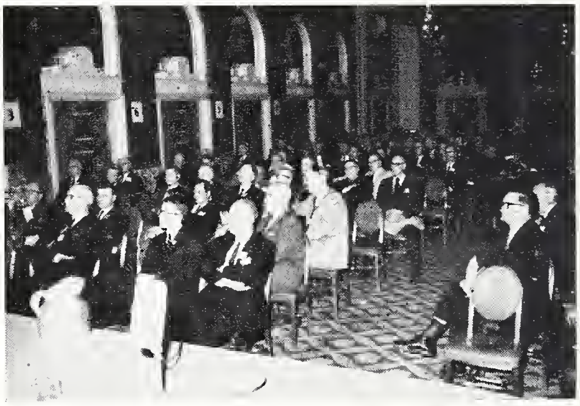
The Committee is also pleased to note the growing number of county medical societies who are promoting health education through sponsored radio and television programs. The most recent addition to this growing list is the Marion-Ralls-Shelby County Medical Society which began sponsoring in December 1960 over a local radio station in Hannibal a thirteen weeks program entitled "Medical Milestones." These are five minute program broadcasts each Sunday at 12:15 for thirteen weeks following the December beginning.

These programs are secured from the Bureau of Health Education of the American Medical Association. The Bureau maintains a fine library of Health Education transcriptions for radio. It also has instituted a library of scripts and films suitable for televised Health Education programs. These films and transcriptions may be borrowed from the American Medical Association Library by county societies or their auxiliaries for use over local stations.

The Committee also congratulates the Jackson and Clay county societies and the St. Louis Medical and St. Louis County Medical societies for two outstanding Health Education projects explained as follows:

Medicine's expanding role in the modern world will be depicted in a Health Fair, primarily for public consumption, to be held in Kansas City, March 18-26, 1961. The fair is to be held in Exhibition Hall of the Municipal Auditorium, sponsored by physicians of the Medical Council of Greater Kansas City, which includes members of the medical societies of Jackson and Clay Counties in Missouri and Johnson and Wyandotte Counties in Kansas.

The fair is designed to broaden the Health Education of the people of that area. Designs are drawn for 200 exhibits on two levels in the Exhibition Hall. In cooperation with school officials within a 50 miles radius plans have been made for high school students and upper grade school students in public, private and parochial schools to attend. No admittance will be charged for students. One aim of the exposition is to stimulate interest of younger persons in following one of the more than 150 careers in the fields of health and medical research.



Audiences for the scientific sessions were appreciative.

The St. Louis Medical Society and the St. Louis County Medical Society have given jointly a transparent, aluminum and plexiglass, full size model of a woman to the Natural Museum in Oak Knoll Park in St. Louis County. This transparent woman has a skeleton of aluminum and a skin of plexiglass. Several hundred feet of lighting cable and thirty small light bulbs show every organ and detail of the body in anatomically correct color, position and dimension. The lighting system is synchronized with magnetic tape-recorded speech so that each of the organs is illuminated as the model describes it. Three sound tracks are planned: (1) for children through the third grade to stress good health, (2) the standard presentation and (3) a special discussion of the human problems of survival in a space age.

High-school students are becoming more and more interested in science fairs. The Committee recommends that component societies assist in sponsoring local science fairs and consider offering an appropriate award to science fair winners. A few medical societies in Missouri have already found this recommendation of definite value. Here is also an indirect method of promoting medical student recruitment.

An exhibit was not displayed this year at the Missouri State Fair by the Committee. However, the Committee feels that local county and community fairs offer local medical societies and their auxiliaries an excellent avenue for promoting sound health education. It seems to this Committee that the carrying out of the suggestions and examples herein offered may also aid in causing more and more people to look to organized medicine for the answers to important health and medical care problems of the day.

J. R. McDaniel, Chairman,
R. A. Walther,
F. H. Hartwig,
J. Earl Smith,
E. A. Belden,
Chester R. Peck,
John P. Mabrey,
C. Howe Eller.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Constitution and By-Laws, W. A. Bloom, M.D., Fayette, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS

The Committee has not met since the last Annual Session as no matters have been referred to the Committee.

The Committee will be glad to work with the Reference Committee on Amendments to the Constitution and By-laws at the Annual Session if it can be of help.

W. A. Bloom, Chairman,
H. M. Parker,
Charles E. Martin,
W. F. Francka,
John F. Rutledge.

W. A. Bloom, M.D., Fayette: I have the following resolution as a supplemental report:

Whereas, The Missouri Radiological Society was formed in 1960 in order to promote the science and art of radiology in the practice of medicine, the protection of public health, and to disseminate information to physicians and members of the public, therefore be it

Resolved, That the Missouri State Medical Association be requested to amend its Constitution and By-laws in order to establish a Committee on Radiology as a standing committee of the Association, and be it further

Resolved, That the By-laws of the Missouri State Medical Association, Chapter VII, Section 2, be amended, following the words "A Committee on Aging" by adding the following: "A Committee on Radiology," and by adding to Section 2 of Chapter VII immediately prior to the beginning of Section 3 the following: "The Committee on Radiology shall consider matters concerned with radiology and shall disseminate information regarding the use of radiology to physicians and other interested groups in this state."

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-Laws.

The report of the Committee on Trauma, Robert E. Funsch, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON TRAUMA

The Committee on Trauma, during the calendar year 1960, was approached by representatives of the American Medical Association in an effort to promote a program for automobile safety in the State of Missouri. Because of illness of the representative of the A.M.A., no meeting was held.

Mr. Richard C. Braisted, of the Cornell University Automotive Crash Injury Research Project, visited with the Chairman to discuss a proposed Missouri-Cornell Automotive Crash Injury Research program. Colonel Waggoner of the Missouri Highway Patrol and members of his organization later met with Mr. Braisted to discuss the feasibility of it. The Missouri Highway Patrol was unable to supply manpower to carry out the project.

The Committee on Trauma will present a panel discussion at the Annual Meeting of the Missouri State Medical Association in Kansas City, in March 1961. The panel is to concern itself with "minor trauma." Included on the panel are five members of the Committee plus Dr. J. Vernon Luck of Los Angeles, California, who will be guest panelist.

Robert E. Funsch, Chairman,
Paul W. Meyer,
Lee T. Ford,
Alan C. McAfee,
Thomas G. Otto,
Howard McHaney,
Otis E. James,
Grafton A. Smith.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Eye Health, John McLeod, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON EYE HEALTH

The Committee on Eye Health did not meet during the year as no matters were referred to it for consideration.

John McLeod, Chairman,
H. B. Stauffer,
T. E. Sanders,
H. B. Ivy,
Paul H. Underwood,
Paul G. Wolff,
Leslie C. Drews,
Michael F. Pernoud,
D. E. Eggleston,
W. L. Post,
Robert S. Minton,
Vernon B. Jackson.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Laboratory Medicine, Fred D. Coller, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON LABORATORY MEDICINE

The Committee met at the Coronado Hotel, St. Louis, December 4, with Fred C. Coller, M.D., Springfield, Chairman, presiding. Those present were Drs. Coller, Hollis N. Allen, St. Louis; T. J. Cooper, St. Louis; Angelo Lapi, Kansas City; Victor B. Buhler, Kansas City; Henry C. Allen, St. Louis; Omer E. Hagebusch, St. Louis; Messrs. Lemoine Skinner, T. R. O'Brien, St. Louis; Helen Penn, St. Louis.

DIVISION OF HEALTH—LABORATORY SERVICES

The Committee reviewed the memorandum of H. M. Hardwicke, M.D., dated September 15, 1960, relating to laboratory services to be offered to physicians by the Division of Health. The Committee concurs with Dr. Hardwicke's previously announced policy for cutting down on the handling of routine serologies by the Division of Health laboratory. Though the Committee recognizes that for some time it will be necessary for the Division of Health to provide these services to some physicians, it was pleased to note that in the last year the number of such serologies was considerably reduced in line with Dr. Hardwicke's expressed wish that more and more of such work be sent by doctors to private laboratories.

The Committee once more wishes to call attention to the previously announced agreement of the Missouri Society of Pathologists that laboratory procedures will be performed without charge when the submitting physician indicates that the patient is indigent.

In his memorandum of September 15, Dr. Hardwicke set out in detail five major specialized services he believes his laboratory may valuably offer to the practicing physicians of the state. These relate to:

1. Phage typing of coagulase positive hemolytic streptococcus aureus.
2. Rapid identification of rabies.
3. The rapid identification of Type A Beta hemolytic streptococci.
4. Epidemiological surveys.
5. Consultant services for medical records librarians.

It is the recommendation of the Committee that the Division of Health be encouraged to make these services available to physicians throughout the state on request.

MEDICO-LEGAL EXAMINERS

The Committee considered a draft of a proposed act, known as House Bill 339, which was introduced in the 1955 session of the Missouri Legislature, pertaining to the establishment of a state Medico-Legal Examiners System in lieu of the Office of the Coroner. The Committee reviewed the first 7 sections of the act (21 sections) and agreed to meet at a later date to review the remainder as well as the changes which were recommended by the various members.

The Committee recognized that it would not be feasible to have the bill in finished form for introduction into the session of the legislature which will begin in January 1961. The Committee will continue its study and when its draft is complete will review it with an appropriate committee of the Missouri Bar. The final draft will then be available for action by the House of Delegates at the 1962 Annual Session and for submission to the legislature in January 1963. It is the judgment of the Committee that no speedier action on this matter would be prudent or possible.

Fred C. Coller, Chairman,
Hollis N. Allen,
T. J. Cooper,
Angelo Lapi.

This report was presented to the Council at the December 10-11, 1960, meeting and was approved.

Angelo Lapi, M.D., Kansas City: I wish to present a resolution as a supplemental report of the Committee on Laboratory Medicine.

Whereas, The continuing education division of the Kansas City University law school is sponsoring a Law-Medicine Institute on May 19 and 20 designed to instruct physicians and lawyers and law enforcement officers in methods of investigating death under obscure, unknown or suspicious circumstances, and

Whereas, This program emphasizes the application of medical science to the administration of justice, and

Whereas, Programs of this nature are likely to impress the public and legislators alike with the need for modern medico-legal investigative offices, thereby facilitating the enactment of legislation necessary to establish such offices, now, therefore be it

Resolved, That the Missouri State Medical Association cooperate with the sponsors of this program to the extent that printed programs and other literature relating to the meeting be permitted to state "in cooperation with Missouri State Medical Association."

The Speaker referred this report to the Reference Committee on Medical Education and Public Health.

The report of the Committee on Industrial Health, H. M. Roebber, M.D., Bonne Terre, Chairman, follows:

REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH

The Committee did not meet in 1960.

The Federal Bureau of Mines in conjunction with the U. S. Public Health Service completed a survey of Missouri mines in December 1960. The purpose of the survey was to determine whether or not silicosis was present. Appreciation was expressed to the Committee for its cooperation in assisting with the study.

Announcements by the A.F.L.-C.I.O. State Council indicate that legislation will be introduced in the 1961 session of the State Legislature to provide for the following:

1. A temporary disability insurance law. At present only four states have such laws.
2. Exclusive state Workmen's Compensation fund. At the present time only eight states have an Exclusive State Workmen's Compensation fund. Most other states, including Missouri, allow any casualty insurance company which writes Workmen's Compensation insuranee to cover the employers in the state. In addition, Missouri permits employers to act as self insurers under the terms of Missouri law.

The Committee will report further after the legislation has been introduced.

H. M. Roebber, Chairman,
S. W. Scorse,
Vencel W. Hollo,
Wm. H. Duncan,
Douglas A. Ries,
James W. Clawson,
C. Rush McAdam,
Richard A. Sutter.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Diabetes, Henry E. Oppenheimer, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON DIABETES

The Committee on Diabetes again was instrumental in the further organization and the increased activities of the new Missouri State Diabetes Association.

Through the Missouri State Diabetes Association, it sponsored a speaker for the annual Missouri State Medical Association meeting in March, 1960. Dr. F. B. Peck, Sr., Director of International Research of the Eli Lilly Company, and first Vice-President of the American Diabetes Association, spoke on "Current Trends in Therapy of Diabetes." Later that same day, Dr. Peck spoke to members of both the Committee and the Missouri State Diabetes Association on "Newer Aspects in Research."

The Missouri State Diabetes Association had two other meetings during the year. Dr. Alexander Marble, of the Joslin Clinic, and a past president of the American Diabetes Association participated in a meeting held at Columbia in May 1960.

In October 1960, another meeting was held at the Lake of the Ozarks and several papers were given by members of the organization as well as guests from St. Louis and Kansas City.

In St. Louis, the St. Louis Diabetes Association had several programs. Dr. Marble spoke to the public on "Pills or Insulin for Diabetes: Which?" Dr. Blair Holcomb, first vice president of the American Diabetes Association, spoke in November 1960 to the public on "Diabetes Care." He spoke to the Clinical Group previously on "Lifelong Management of Diabetes."

A dinner for diabetic persons was also held in March 1960 and, despite a near-blizzard, was well attended.

Through the state many detection campaigns were carried out and many new patients with diabetes discovered. Kansas City and St. Louis were two among many who carried out these drives in November. The Missouri State Diabetes Association is organizing a drive for 1961, to be carried out in some local area not yet decided upon.

Past Presidents were honored at the Annual Banquet.

Dr. Robert L. Jackson, Columbia, was installed as president of the Missouri State Diabetes Association in May 1960. Other officers are Dr. Thomas Burns, Columbia, secretary, and Dr. John Caldwell, Kansas City, vice president. New Councilors are Dr. H. Loyd, Jefferson City, and Dr. Harry Gilkey, Kansas City.

Dr. H. E. Oppenheimer, St. Louis, was elected a councilor of the American Diabetes Association for a three year term in June 1960.

In general, the various aspects of diabetes control, detection and education through the state are being well cared for. The Committee on Diabetes, since the formation of the Missouri State Diabetes Association, has not found it necessary to be an active dominant force but carries out its activities as a correlating group between various organizations throughout Missouri.

HENRY E. OPPENHEIMER, Chairman,
LUCIEN W. IDE,
J. BRUCE LEMMON,
H. M. GILKEY,
CHARLES M. LAMKE,
WILLIAM H. OLMSTED,
ROBERT E. KOCH,
RALPH W. CASFORD,
J. H. WALTERSCHEID.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Anesthesiology, Russell D. Shelden, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON ANESTHESIOLOGY

There have been no formal meetings of this committee during the year.

Approved residency programs and postgraduate training facilities are available throughout the state of those physicians interested in anesthesia.

The annual meeting of the Missouri Society of Anesthesiologists is planned for April at the University of Missouri Medical Center. All physicians practicing anesthesia part time are invited to attend and should watch for the meeting notices.

RUSSELL D. SHELDEN, Chairman,
OTTO T. BLANKE,
EDWARD O. KRAFT,
CARL K. NESS,
WALTER W. TILLMAN.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Hospital and Professional Relations, Hollis N. Allen, M.D., St. Louis, follows:

REPORT OF THE COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

The Committee did not meet in 1960.

The Chairman was reappointed to serve as a member of the Advisory Committee to the Director of Health concerning problems in the licensing of nursing homes.

HOLLIS N. ALLEN, Chairman,
VICTOR B. BUHLER,
WALTER S. SEWELL,
STANLEY S. PETERSON,
RALPH PERRY,
W. F. FRANCKA,
WILLARD BARTLETT.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Control of Venereal Disease, Edwin M. Powell, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CONTROL OF VENEREAL DISEASE

The Committee on Control of Venereal Disease met at the Missouri Hotel, Jefferson City, January 11, 1961. Members in attendance were: Dr. E. M. Powell, Dr. Robert Bristow, Dr. A. W. Neilson, and Dr. E. M. Cannon. Others in attendance were: Dr. E. A. Belden, Dr. William Meinershagen, Dr. J. P. Russell, Mr. Tom Dundon, Mr. Wilson Corcoran, Division of Health, Mr. Ray McIntyre of the State Medical Association staff, and Dr. Hollis Allen of the Committee on Laboratory Medicine of the Association.

The reporting system on positive VDRL tests from private laboratories by number was discussed. Dr. Allen and the members agreed that the laboratories had no increased difficulty other than the actual work of sending the reports. There were 174 private laboratories reporting. The State Health Department stated that, in general, it was pleased in that although the number of positive reports was lower, 65 per cent were cases that had not been previously reported, 25 per cent were previously reported and 10 per cent were false positives. The disadvantages of the number system to the State Health Division were: (1) The difficulty of carrying out a follow-up and epidemiologic study where only a number is used for identification. If the private physician has already filed this number on the patient's record it is left to his memory. (2) The inability to check repeated positive serology on the same person, therefore making the statistics inaccurate and added work and bother in attempting to follow-up on the same patient. Because of these disadvantages, a motion was made by Dr. Neilson and seconded by Dr. Bristow that a pilot study be set up in St. Louis, using both name and number. This was to be presented to the St. Louis Medical Society for its approval by Dr. Neilson and Dr. Cannon.

The question was raised as to what procedure was used in patients with positive serology who were out of state. The Committee was assured by the Health Division that the same procedure would be followed as with in state patients, and that no follow-up study would be made without the approval of both the consulting and referring physician.

The question was raised of the percentage of false positive examinations. Dr. Allen and Dr. Neilson discussed the VDRL as being a valuable screening test only, and Dr. Allen stated that in his laboratory a positive VDRL is followed by a Kahn and if necessary a Reiter fixation before a positive report is submitted. Dr. Neilson recommended, seconded by Dr. Bristow, that Dr. Allen submit a proposal to the Committee on Laboratory Medicine of the Association that this be a routine procedure in order to avoid as nearly as possible the false positives that can occur with this test.

The question of the premarital VDRL was discussed. A recommendation from Dr. Shapiro of the St. Louis Health Department was read. The number of cases which were reported by the Health Department was listed. In 1960 there were 36,000 serologies submitted with a reactive rate of 8 per cent. The Committee would like to bring to the attention of the Council that it feels the present premarital law is inadequate and that the signature of the local physician should accompany the result of the serology. This recommendation was made because many approved laboratories are not run by physicians. Many negative reports have the physician's name without his knowledge, and only by the actual doctor's signature can the reports be known to be accurate. This has an added advantage, that of contact by the physician for marriage counseling and guidance where needed.

It was also recommended to the Council by this Committee that it revise its stand and endorse the fee for treatment of syphilis on a limited basis in areas where conditions warrant it and where the local physicians desire it. On the recommendation of the Health Division, the Committee asked the Council last year to rescind this service. This has been found to be disadvantageous to the Health Division by lack of cooperation in the follow up of patients and the failure of some patients to receive treatment.

Edwin M. Powell, Chairman,
T. E. McMillan,
E. M. Cannon,
A. W. Neilson,
Robert B. Bristow,
John E. Byrne.

This report was presented to the Council on January 22 and was approved by the Council.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Physical Medicine and Rehabilitation, D. Elliott O'Reilly, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PHYSICAL MEDICINE AND REHABILITATION

The Committee met on Sunday, July 17, 1960, at the Coronado Hotel, with Dr. D. Elliott O'Reilly, Chairman, St. Louis, presiding. Present were Drs. William J. Stewart, Columbia; F. O. Tietjen, Jefferson City; Otakar Machek, St. Louis; Miss Lorraine F. Lake, Chairman, Missouri Committee on Legislation, American Physical Therapy Association, and Mr. T. R. O'Brien, St. Louis. Drs. F. D. Sunstrom, Springfield; Robert H. Fitzgerald, Independence, were not present.

The purpose of the meeting was to consider proposed legislation submitted by the Missouri Chapter of the American Physical Therapy Association which contemplates licensure of physical therapists in Missouri.

Dr. O'Reilly reviewed the past history of the proposal, pointing out that the Missouri chapter had submitted a proposal in 1956 which was tentatively approved in principle by the Committee. The Council of MSMA, in considering the Committee report recommended that efforts to secure legislation be delayed until after the joint licensure bill be adopted by the legislature.

SPECIAL A.M.A. COMMITTEE REPORT

In the meantime, the American Medical Association created a special committee known as "The Committee on the Relationships of Medicine With Allied Health Professions and Services."

The report of the A.M.A. Committee, adopted by the A.M.A. House of Delegates, June 1960, considered physical therapy legislation in the various states. The report listed 33 states which have statutory regulations, 17 of which have license laws and 17 have certification laws. (Note, two laws are in effect in California, one a licensure law, the other a certification law.) These laws vary in scope, however, many of them including a provision to the effect that the person licensed or certified must practice physical therapy only on prescription or under the direction or supervision of a licensed physician. This provision is weak though in the case of certification laws because of the nature of such laws.

All of the laws contain some limitation on scope of practice, but the definition differs somewhat from state to state. The most complete definition is in Connecticut. The most specific limitation of scope is found in the Oklahoma law.

In general, the A.M.A. report included the following pertinent statement:

"The medical profession believes that the adoption of a position on governmental (state) regulation which would apply permanently to all health related sciences, professions and services is not in the present nor future interest of the public. In relation to this general principle, the medical profession believes that:

"(a) The extension of governmental licensure and/or certification for scientific, professional and technical health personnel is not indicated except when it is mutually agreed that such regulation is necessary in the public interest and such regulation is jointly developed and supported by the medical profession and the segments of medicine concerned and the group seeking statutory regulation.

"(b) If instances do arise in which it is jointly agreed that it is necessary in the public interest that governmental (state) licensure and/or certification be developed for persons in activities directly involving the care of patients: (1) such statutes must require acceptable educational standards as determined by individuals acknowledged as leaders in education and practice in the field; (2) such statutes relating to services which involve the diagnosis or treatment of nervous, mental or physical illnesses or disorders of individual patients should require such services to be performed under the direct supervision of or in genuine collaboration with a qualified physician."

After discussion with Miss Lake, of the Physical Therapy group, in which several changes in the proposal were recommended, the Committee approved the legislation in principle, as amended, for submission to the Council of MSMA. Miss Lake agreed to discuss the changes with her group and to report back about September 1.

H.R. 12580

H.R. 12580, known as the Mills Bill, was adopted by the House of Representatives on June 23, and is now being considered by the Senate Committee on Finance. That committee will act upon the bill sometime in August after the Congress returns from its recess.

The act, among other things, Title IV, would eliminate the age 50 requirement for disability insurance benefits. It would also eliminate the six month waiting period for disability benefits for an individual whose disability had been terminated and who again became disabled within a five year period.

Under existing law, disabled persons who return to work under a state approved vocational rehabilitation plan continue to draw benefits for up to twelve months even though they are engaged in substantial gainful activity. Individuals who rehabilitate themselves or who are rehabilitated under a program other than a state rehabilitation program do not have this benefit. This title would amend the law to provide that any disabled individual would be granted a nine month (not necessarily consecutive) trial work period in which he could perform substantial services without losing his benefits. If he were determined to be able to engage in substantial gainful activity, his benefits would be terminated three months later. An individual whose condition improves, regardless of the trial work period, would receive benefits for three months following the determination of his ability to engage in substantial gainful activity.

This title also would liberalize the coverage requirement for certain individuals disabled before 1955. Existing law requires that to be eligible for disability benefits the individual must be fully insured, i.e., coverage in one out of two quarters (under this bill, coverage in one out of four quarters) or 40 quarters of coverage, and have coverage for five years in the 10 years preceding the onset of disability. This title would authorize benefits for an individual who had 20 quarters of coverage and coverage in all quarters elapsing after 1950 and before the onset of disability, if he had coverage for a minimum of six quarters.

D. ELLIOTT O'REILLY, Chairman,
F. D. SUNDSTROM,
WILLIAM J. STEWART,
F. O. TIETJEN,
ROBERT H. FITZGERALD,
OTAKAR MACHEK.

The report was presented to the Council at the September 24-25 meeting. It was accepted with the understanding that the Association would endorse the legislation when it was satisfactorily amended.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The Reference Committee on Miscellaneous Affairs held several meetings.

The report of the Committee on Civil Defense Disaster Medical Care, Carl D. Siegel, M.D., Sedalia, Chairman, follows:

REPORT OF THE COMMITTEE ON CIVIL DEFENSE DISASTER MEDICAL CARE

The Committee met at the Missouri Hotel, Jefferson City, on November 20, with Carl D. Siegel, M.D., Chairman, presiding. Those present were Drs. Siegel; Carroll P. Hungate, Kansas City; George L. Watkins, Farmington; William C. Allen and H. M. Hardwicke, Jefferson City, and Mr. Gene Lunn, St. Louis.

The meeting was called to order at 11:15 a.m. by the Chairman, Dr. Siegel.

Dr. Hardwicke reported briefly on recent Civil Defense activities of the State Division of Health and problems associated with implementing an effective program by his organization. Dr. Hardwicke noted that:

1. He will attend a meeting of state health authorities and the federal government's Radiological Health Division in Washington, D. C.

2. The United States Public Health Service, serving as agent for the U. S. Department of Health, Education and Welfare, plans to take over administration of the federal government's program for 200-bed hospitals which would be available in the event of natural disaster or enemy attack.

3. The Missouri State Division of Health is in the process of establishing a Disaster Communications Radio System. Some 50 "ham" radio operators in all sections of the state have been appointed to act in an emergency, and plans call for a mobile communications unit to be dispatched to any disaster area.

4. Dr. Hardwicke pointed out that the major problem with respect to adequate Civil Defense programming is

lack of funds. His own division, he said, does not have any Civil Defense appropriation. He also cited these facts: (a) Civil Defense personnel in Missouri are not under the merit system—all posts are political patronage jobs. (b) The Missouri legislature has appropriated only a small amount of funds for all Civil Defense activities in the state. It might be helpful if legislators were made more aware of existing civil defense measures to spur interest. (c) Indicative of the lack of coordination is the fact that the director of the Missouri State Division of Health has not received an invitation to attend any of the Missouri Atomic Energy Commission's last five meetings. (d) The addition of Dr. Allen to the State Division of Health staff puts the division in good position to undertake expanded civil defense activities if and when funds are appropriated by the legislature.

The Committee as a whole next considered and acted upon a number of proposals and recommendations made by members of the group. These topics included:

1. The MSMA Committee on Civil Defense Disaster Medical Care should make every effort to support all types of Civil Defense activities in the state, offering medical leadership in the development of all such programs.

2. It was recommended that MSMA take steps to initiate a Governor's Civil Defense Advisory Committee. This committee would serve as advisor to the Governor on aspects of Civil Defense. Lists of names submitted by MSMA to the Governor for appointment to serve on the Advisory Committee should consist of physicians who are familiar with disaster medical care, and be men of such stature as to influence organizational medicine and the state legislature. It was suggested that the advisory committee meet quarterly and that meetings be open to non-medical groups and individuals interested in Civil Defense.

3. A recommendation was made that the Chairmen of the civil defense committees of various organizations meet quarterly to discuss and coordinate activities. Such inter-association conferences could be called by the State Division of Health. Objectives of the inter-association group would include: (a) Manpower—inventory available medical and para-medical personnel throughout the state. (b) Training—working in conjunction with the U. S. Public Health Service, packets of educational materials could be developed, along with films and slides. (c) Utilization of Facilities—plans could be developed for proper utilization of 200-bed pre-positioned Civil Defense hospitals in the state.

4. It was suggested that the Chairman and Vice Chairman of the MSMA Civil Defense Committee be appointed to serve for three-year terms. The Vice Chairman would succeed as Chairman. Members of this Committee should include medical representatives from Kansas City, St. Louis and the three medical schools in the state—at Missouri, St. Louis and Washington universities.

5. The Chairman of the MSMA Committee on Civil Defense was requested to secure approval of the MSMA Council at next meeting in December of recommendations for: (a) A Governor's Civil Defense Advisory Committee and (b) establishment of similar advisory committees in each county.

6. It was suggested the MSMA Council be advised that 1.5 million copies of a new pamphlet, "Two-Week Survival in a Shelter," will be available for distribution in the state on or about January 1, 1961.

7. It was recommended that the Committee have a half-day Civil Defense meeting on Sunday, March 19, just prior to the start of the Annual Session. Wives could be invited to attend, and a recognized authority on C.D. be presented as guest speaker.

8. The Committee members feel that all Civil Defense activities should eventually be paid for with tax funds. It was suggested, however, that the Chairman request an annual MSMA appropriation of $1,000 to help defray Committee members' necessary expenses until such time as the state legislature appropriates money for this purpose.

9. The Chairman will also seek Council approval of a request for booth space at the 1961 Annual Session for display of a scale-model C.D. hospital.

10. It was recommended that the Committee work with deans of the three medical schools in Missouri and the M.E.N.D.S. coordinators to implement annual area test alerts.

11. It was recommended that the MSMA Executive Secretary, the Chairman and members of the MSMA Civil Defense Committee, the Director of the Missouri Civil Defense Authority, County Medical Society Civil Defense Chairmen and local Public Health officers meet to formulate a uniform civil defense plan for the entire state.

12. It was suggested that each member of the MSMA Committee on Civil Defense be assigned the responsibility for maintaining contact with one of the other professional groups in the state which are interested in Civil Defense, i.e., osteopaths, dentists, nurses, veterinarians, *et al.*

Dr. Siegel announced a one-day course in Civil Defense, entitled "Early Care of Multiple Injuries" to be presented at the University of Missouri Medical Center on April 1.

The meeting was adjourned at 1:30 p.m.

Carl D. Siegel, Chairman,
M. P. Leech,
H. D. Steinbeck,
Carroll P. Hungate,
John R. Forgrave,
J. M. Canella,
Curtis H. Lohr,
R. Ned White,
George E. Thoma,
George L. Watkins,
O. P. Hampton.

This report was presented to the Council at its meeting on December 10-11, 1960. The Council designated that no appropriation be made but that expenses of the Committee be presented to the Council as they occurred. The remainder of the report was approved.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Aging, Stanley S. Peterson, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON AGING

The Committees on Medical Economics and Aging held a joint meeting at the Park Plaza Hotel, St. Louis, December 28, 1960, with Stanley S. Peterson, M.D., Springfield, Chairman of the Committee on Aging, and A. P. Rowlette, M.D., Moberly, Chairman of the Committee on Medical Economics, presiding. Those present were Drs. Peterson, Rowlette, G. W. Winn, Boonville;

Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; Robert Kingsland, Clayton; Byron E. Watts, Jefferson City; Messrs. Lemoine Skinner, Jordan Singleton, Robert Duffey, Ray McIntyre, Tom R. O'Brien, and Helen Penn, St. Louis.

PURPOSE

The purpose of the meeting was outlined as work toward the implementation for Missouri of Public Law 86-788, the Mills-Kerr bill. Attention was called to the action of the Council which was "approve of the principles outlined in the Kerr-Mills bill and that the legislature be urged to implement the program realistically in our state, and that the opinion of the Association be made public."

It was pointed out that the A.M.A. and most states favored implementation of the law; also that method of implementation was left to individual states. It was also brought out that the MSMA House of Delegates had opposed the acceptance of any payments by physicians under the vendor program and that only the House of Delegates could change that phase.

MISSOURI SITUATION

Figures for Missouri were presented as 470,000 residents over the age of 65; 115,700, or 26 per cent, on old age assistance, with 37,000 of the 115,700 receiving Social Security.

Under the present program the average monthly payment to the 115,700 is $53.05 for subsistence, $6.45 for medical care, with $0.48 going into the vendor pool for medical care, or a total of $60.01, of which the U. S. Government pays 53.42 per cent.

The Kerr-Mills law automatically increased the U. S. Government share of the vendor program by 15 per cent, approximately $100,000 per year.

If state appropriations are increased, it was pointed out that the most advantageous way to utilize additional state funds would be to devote these to subsistence payments and transfer an equal amount of money to medical payments under the vendor program. The government will contribute 53.42 per cent toward additional subsistence payments (up to a total average payment of $65.00 per month per recipient). The federal government will contribute 68.42 per cent (53.42 plus 15 per cent) toward vendor medical payments, up to a total of $12.00 per month per recipient.

MEDICALLY INDIGENT

Programs for medically indigent follow the same general requirements as those for persons on Old Age Assistance with the additional proviso that such programs must include some institutional and some non-institutional care. There is no financial limit to programs for medically indigent (such as the $12.00 per month per recipient for vendor payments under the OAA program). The federal government will contribute 53.42 per cent of the expenditure on medically indigent programs. The definition of "medically indigent" and the benefits of the program are left to the discretion of the state.

DISCUSSION

Various phases discussed include the increase to per diem payments to hospitals under the present vendor program, the rising number of persons on social security in the older age group, whether "acute illness" and "medical emergency" be retained in any new legislation, the inclusion of "near needy" under the Kerr-Mills law; the advisability of a lien and recovery law and whether that would decrease or increase those on assistance rolls, what a minimal level as set forth in the Kerr-Mills law might be, the need for a medical advisory set-up in any legislation, the probability that people are getting adequate care in the larger centers but may not be in sparcely populated areas thus making it necessary to go to the state level for care, publicity on action of the committees or of the Council, that doctors still are willing to give medical care to the needy but do not want to be obstructionists, that study should be given to what a minimum should be, that subsistence allotment is not sufficient at present, that "emergency" might well be changed to "necessary."

ACTION

On motion of Dr. Peterson, duly seconded, it was voted that the staff be asked to prepare recommendations embracing the minimum requirements of the law, unless study finds these to be inadequate, making clear that physicians are not to be paid, that it is recognized that the law is socialistic but also is a compromise and that the problem is not as great as it is made out to be but is worthy for those few to whom it does apply.

DELEGATES INFORMED

It was decided that county societies be informed on the Kerr-Mills law and its implications and that they be asked to instruct their delegates to the Annual Session on action to take.

RECOMMENDATIONS OF THE COMMITTEE ON MEDICAL ECONOMICS AND AGING

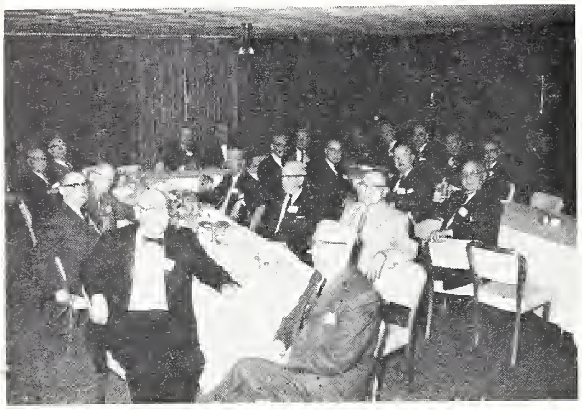
While it should once again be emphasized that the medical profession, through its experience and its service as provider of care to the sick, knows that the problem of medical care for the aged is not as great as has been pictured in some quarters, the Committees recognize that society will always include some individuals who are unable to provide the necessities of life for themselves.

The Committees, therefore, recommend that the Missouri State Medical Association support the principles of the Kerr-Mills law and urge the legislature to implement the law in Missouri.

At the same time, the Committees recommend that the Association continue the policy enunciated in 1958 by the House of Delegates—that physicians not receive government funds as payment under the so-called "vendor" program for medical care of the indigent—and that this policy be extended to apply to the implementation of the 1960 Kerr-Mills law in Missouri.

The Committees feel, however, that most of the people who might come under these programs in Missouri have no real wish to become complete wards of the state. They wish to retain their self-respect and pride and to do what they can to maintain themselves through their own efforts or through their families. The Committees believe that all parties—individuals, organizations and government—should use every means to discourage the concept of reliance on welfare programs to pay all costs for all purposes, and to encourage, on the other hand, individuals, their relatives and their friends to accept the personal responsibility to pay what they can toward their living expenses, including medical care where necessary. If outside help then becomes necessary responsibility should, in each instance be accepted by the local community and county governments.

In the administration of programs implementing the Kerr-Mills law, the Committees recommend that the Association urge the legislature to continue the official representation of medicine in an advisory capacity through statutory provisions similar to those contained in the present "vendor" program.



A 50 Year Club was formed at a luncheon meeting.

As a further general recommendation, the Committees feel that the legislature should be urged to enact a Lien and Recovery Law in Missouri to discourage potential abuse of public assistance programs and encourage acceptance of responsibility for the support of individuals by their families.

At the present time, the "vendor" program for medical care for public assistance patients includes individuals under four programs—Old Age Assistance, Aid to the Blind, Aid to Dependent Children, and Aid for the Permanently and Totally Disabled. The program provides for increased assistance payments, up to $100 per month, to patients who are permanently and totally bedfast whether confined at home or in a nursing home. It provides also for payments for hospital care in cases of medical emergency or acute serious illness.

State appropriations for the nursing home phase of the program were $1 million a year for the 1958-60 biennium, with another $500,000 a year appropriated for the hospitalization phase.

When the program was begun, payments to hospitals were made on the basis of $5 per day, up to 14 days per confinement, for these patients. Later, this was increased to $10 per day, and payment is currently being made on the basis of the hospital's per diem cost, for up to 14 days per confinement.

The original $500,000 per year appropriation, however, is not enough to continue payments to hospitals on this basis. According to the estimate of the Director of the Missouri Division of Welfare, a total of $2 million a year would be needed for this phase of the program.

The Committees recognize the financial situation of the state in regard to appropriations and taxation in the next biennium. They recognize that there will be requests for substantial appropriations for other worthwhile programs, both in health and other fields. They recognize that money payments to Old Age Assistance recipients are now close to minimum subsistence levels.

With consideration of these and other factors, in view of the need of hospitals to recover their expenses of providing care for patients, and with consideration of the magnitude of the appropriation needed, the Committees therefore recommend that the Association support the implementation of the Kerr-Mills law specifically through encouraging the appropriation of sufficient additional state funds, which, with matching Federal money, will enable the continuance of payments under the program to hospitals on the basis of their per diem costs.

Stanley S. Peterson, Chairman,
Ralph Perry,
Rolla B. Wray,
Louis H. Kohler,
C. Thorpe Ray,
Robert Kingsland.

This report was presented to the Council on January 21 and was accepted.

Dr. Stanley S. Peterson, M.D., Springfield: I have been privileged to be Chairman of the Committee on Aging and part of my duties have been, over the last year, to attend some meetings, in Missouri in connection with the White House Conference, in Washington on the White House Conference. I came home from Washington convinced that the American Medical Association had let us down, and I said so publicly on numerous occasions. Yesterday I attended another meeting of the AMA, along with Dr. Costello and Dr. Griffith, and I decided I was all wrong about the AMA. I came from the meeting yesterday feeling that we really have guidance and that we should pay attention to what they say. As one man in the meeting said, if you know what you are for, you are not hesitant to be against what you are against. He further said that if you do not believe this, think of the Ten Commandments—eight of them start with "Thou shalt not," and few people are able to stand up and say that that is not a positive program.

The AMA was founded in strife and has been in the middle of strife most of the time and the only time it has amounted to much is when it has been against something. He started his illustrations of this as the cleaning up of medical education. The AMA was not for the standard things at that time, it was against them.

We have arrayed against us this year the President, the Congress, the press, labor, churches. We have discord in our ranks due to misunderstanding, hopelessness, apathy, recklessness and defeatism but, in spite of that, the AMA is convinced that socialized medicine in the guise of the King-Anderson, Forand and the Cohn bills shall not be passed in this coming year.

In case there is anybody in this room that is not up to date on the King-Anderson Bill, he must get up to date, because, whether we like it or not, doctors' services will be sold by hospitals to the federal government. Pathologists, radiologists, anesthesiologists and physiotherapists are included.

They assumed in Chicago that the Kerr-Mills Bill is being facilitated as fast as it can be by the doctors in the various states, and Missouri has the distinction of being one of two states that has taken no action on this so far.

Senator Kerr spoke at the meeting and gave an eloquent talk about the Kerr-Mills bill and why it was developed.

We can stop the King-Anderson Bill in the House Ways and Means Committee if we work. We have two men on the House Ways and Means Committee from

Missouri. That means that in this room we have about as powerful a lobby as you can get anywhere. These are your representatives and we must talk to them.

They say this will be free choice, but it will not be free choice. There is no way the government can spend seven or eight million dollars without controlling it, and I would hate to live under a government that would turn seven or eight million dollars loose without appropriate controls.

The Blue Shield, of course, is our friend, and they are fully committed to the preservation of private medical care. Blue Cross is another. The National Association of Manufacturers are our friends for the first time. The Farm Federation, of course, is with us.

Dr. Blasingame closed the meeting and he says this is the plan: First, you get your paid staff in favor of this program; secondly, provide adequate personnel to do the job and then step up education, starting first with your doctors and, when they are convinced, then go to the Auxiliary, and then your friends. We see two and a half million people every day, and we need only a thousand letters a week from each state to get this job done, and we can do it. Go see your ministers. The Council of Churches are on record as being in favor of the Social Security approach to paying for medical care.

We should get a letter to the editors program going. Lastly, probably concurrently, we should get a political action committee working. There will be a Political Action Committee sponsored by physicians on a national level which will be effective.

It is all right to spend 50 thousand dollars educating doctors, but if we do not take care of ourselves and our organization, those men that we are so quick to educate will not have an organization or be able to practice medicine in the way we think about it. So, spend some money and work on this because it is this House that has to do this, and nobody else.

(Information was available to Delegates in the Delegates' Handbook on the Kerr-Mills Law. Included in the information was the following: "Medical assistance for the aged means payment of part or all of the cost of the following care and services for individuals 65 years of age or older who are not recipients of OAA but whose income and resources are insufficient to meet all of such cost—inpatient hospital services, physicians' services, home health care services, physical therapy and related services, laboratory and x-ray services, diagnostic, screening and preventive services, skilled nursing-home services, outpatient hospital or clinic services, private duty nursing services, dental services, prescribed drugs, eyeglasses, dentures and prosthetic devices, any other medical care or remedial care recognized under state law.")

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Tuberculosis, Florence C. MacInnis, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON TUBERCULOSIS

On Sunday, August 7, 1960, the Committee on Tuberculosis of the State Medical Association met with committee members from the Missouri State Division of Health and from the Missouri Tuberculosis Association in Jefferson City.

The subject of this meeting was "The Current Status of the Tuberculosis Problem and Program in the State of Missouri." The following are excerpts from the report on this meeting, which was compiled by Dr. C. W. Meinershagen, Director of Tuberculosis Control, Division of Health:

The Division of Health has continued its interest in tuberculin skin testing with which it experimented in a pilot project in Newton County. This approach determines the status of tuberculosis in schools and is used as a case finding method for contacts of the positive reactors in the schools.

There was discussion on more effective use of tuberculosis case registers at county and dsitrict levels. To implement this it was suggested that there be a consultant nurse to help the counties with their registers and case finding programs.

Fifteen per cent of public health nurses' time in Missouri, excluding St. Louis City and County and Kansas City, is spent in tuberculosis work. Twenty-five per cent of nurses' home visit time is also spent for tuberculosis. This activity ranks second only to child health activities.

The Division of Health functions primarily through its 50 county health services and five district offices and will continue to provide anti-tuberculosis drugs. Approximately $2,000 was spent in 1956, and in 1959 almost $10,000 for these drugs. This excludes the cities of Kansas City and St. Louis.

A strong plea was made for availability of anti-tuberculosis drugs to the private physician, to be given to patients with limited means, particularly in the St. Louis area. In Kansas City and in rural Missouri, it has been possible all along for private physicians to request drugs for patients whom they know are unable to pay for them.

There was a discussion on organized home care for the tuberculous, which is now being provided to about 3,000 in the United States in contrast to unorganized home care programs in which there are possibly 3,000,000 people who are recipients of the care. Organized home care is practicable at the present only in large cities where adequate supervision and hospital laboratory facilities are available.

There were exchanges of thoughts on mass x-ray for tuberculosis case finding.

A suggestion was made that a routine hospital admission tuberculin test for each previously untested, or previously negative hospital admission, would be helpful in tuberculosis control in Missouri.

There were 15 present at this meeting. It was the consensus of opinion that this interchange of information and consideration of problems in the tuberculosis field is advantageous. Each person in attendance contributed generously from his knowledge and experience in the varied phases of the tuberculosis control program potentials.

FLORENCE C. MACINNIS, Chairman,
PAUL MURPHY,
H. M. ROBERTS,
JOSEPH L. LUCIDO,
WALTER C. GRAY,
DAVID N. KERR,
GLENN O. TURNER,
CARL G. POPP.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Study of Cardiac Disease, Earl L. Loyd, M.D., Jefferson City, Chairman, follows:

REPORT OF THE COMMITTEE ON STUDY OF CARDIAC DISEASE

The Committee met at the Missouri Hotel, Jefferson City, on November 13, with Earl L. Loyd, M.D., Jefferson City, Chairman, presiding. Those present were Drs. Loyd, William J. Shaw, Sr., Fayette; Jack M. Martt, Columbia; H. M. Hardwicke and W. C. Allen, Jefferson City, Division of Health; Mr. T. R. O'Brien and Miss Helen Penn, St. Louis. Drs. E. Lee Shrader, St. Louis; William I. Park, Springfield; Martin P. Hunter, Kansas City; William J. Gillespie, St. Louis; Caryl A. Potter, St. Joseph; and F. J. Biggs, Poplar Bluff, were absent.

Dr. Loyd stated that the purpose of the meeting was to discuss the question posed by Dr. Hardwicke concerning the use of federal appropriations for heart disease. The question presented was whether or not the Division of Health should continue to furnish grants to St. Louis University School of Medicine for postgraduate medical education or should all funds be utilized for other programs.

Dr. Hardwicke outlined the possible uses of the federal funds as postgraduate education, furnishing prophylactic drugs for indigent heart patients and furnishing laboratory facilities for diagnosing hemolytic streptococcus. It was pointed out that the funds may be used for any purpose except therapy. Dr. Hardwicke said that all funds could be used on postgraduate education, or that all funds could be used in the other fields outlined but that there were not sufficient funds to carry out each program to a full extent.

PRESENT PROGRAM

The present program was outlined as including postgraduate assistance to St. Louis University (the only school requesting this in the last year but others now requesting assistance), a rheumatic fever register and some help with furnishing of prophylactic antibiotics, for cardiac clinics in Kansas City, St. Louis, Children's Cardiac Center, Kansas City, and laboratory service planned to assist physicians in diagnosis of hemolytic streptococcus.

ST. LOUIS UNIVERSITY

It was agreed that no change in furnishing funds to St. Louis University School of Medicine be made during the current fiscal year ending June 30, 1961.

PROGRAM TO BE OUTLINED

Dr. Hardwicke was asked to supply the committee with a full report on the program now in existence and to give an outline of what might be done with the funds. Committee members would be expected to return comments on the plans.

CARDIAC CLINICS

Dr. Martt reported that the University of Missouri Medical School was considering establishment of traveling Cardiac Field Clinics which would include case findings, consultative service and epidemiologic studies and surveys pertaining to heart disease. This is being considered in part because it is felt that many indigent cardiac patients are unable to make the trip to the Medical Center at Columbia because of financial or physical reasons. Staffing of these clinics would be by members of the staff of the University of Missouri Medical School and it is hoped that a grant will be obtained from the USPHS to assist with the costs. It is further hoped that portable x-ray equipment of the Division of Health might be available. The possibilities of fluoroscopic equipment being used was discussed. It was decided that this matter be placed before the Council of the Association and if approved, contact be made with the various medical societies prior to any field trips. It was felt that the Heart Association might assist in making appointments and doing other preliminary work.

Earl L. Loyd, Chairman,
E. Lee Shrader,
William I. Park,
William J. Shaw, Sr.,
Jack M. Martt,
Martin P. Hunter,
William J. Gillespie,
Caryl A. Potter,
F. J. Biggs.

This report was presented to the Council at its December 10-11, 1960, meeting and accepted with the recommendation that the heart clinics receive further study by the Committee with further report to the Council.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Rural Medical Service, Jack Mullen, M.D., Bonne Terre, Chairman, follows:

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

The Committee met at the Missouri Hotel, Jefferson City, on September 11, with Jack Mullen, M.D., Bonne Terre, Chairman, presiding. Those present were Dr. Mullen, B. J. Bass, M.D., Salem; Charles Worley, M.D., Sweet Springs; Fred Wommack, M.D., Crane; Kenyon Latham, M.D., California; Mr. Ray McIntyre, St. Louis.

PHYSICIAN PLACEMENT

It was agreed that not all communities in Missouri, now seeking a physician or additional physicians, are in actual need. A practical, efficient method of determining when a community in Missouri needs a resident doctor, or more doctors, should be developed. Possibly local medical societies should be requested to determine and list those communities or towns in their areas needing doctors.

A suggestion was made that locations seeking a physician indicate the availability of housing, office space and financial assistance (loans with little or no collateral required). In this respect a number of towns over the state were discussed where such factors are available, or will be made so, to a physician. Committee members gave their ideas concerning the advantages and disadvantages of solo vs. partnership or group practice in rural areas. The present activities of the graduates of Missouri University Medical School were discussed. Seven of these young physicians are now practicing in locations of Missouri outside of metropolitan areas.

PRECEPTORSHIP PROGRAM AT M.U.

Those members of the Committee present were agreed that the preceptorship training program at Missouri University Medical School is basically a sound idea and that it has already produced good results. However, it was agreed that some additional things might be done to improve it. The out-state faculty, selected to serve as preceptors, might well be invited to the medical school for special instruction meetings regarding the program. Some of these preceptors may well be invited to lecture on certain occasions to the medical students at the University. In other words, a closer relationship and better understanding between the medical school and the preceptors should be a definite future goal. This Committee would be glad to meet with Dr. Vernon Wilson at any time to discuss the preceptorship program further.

MSMA LOAN FUND

A short discussion of the recently established Missouri State Medical Association Medical Student Loan Fund occurred. It was agreed that this was a sound, progressive step. The Committee congratulates the Council of the Missouri State Medical Association on this action and suggests that the fund be increased by appropriate means.

STATE RURAL HEALTH CONFERENCE

The possibility of promoting, in cooperation with farm and other interested groups, a state wide conference on Rural Health was briefly discussed. This matter was left for future consideration.

STATE FAIR EXHIBIT

Some members feel that good health education exhibits at the Missouri State Fair are well worthwhile. It was pointed out that the State Association presented such exhibits for a number of years. However, for the past few years such exhibits have not been shown. The Field Secretary was requested to investigate new exhibits of the American Medical Association which might be appropriate for future Missouri State Fairs.

Jack Mullen, Chairman,
E. L. Niedermeyer,
K. S. Latham,
B. J. Bass,
John F. Pearl,
F. A. Barnett,
Charles A. Worley,
Fred L. Wommack.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on American Medical Education Foundation, James P. Murphy, M.D., St. Louis, follows:

REPORT OF THE COMMITTEE ON THE AMERICAN MEDICAL EDUCATION FOUNDATION

Figures for the AMEF campaign conducted last October will not be available until sometime after the Annual Session of the Missouri State Medical Association. Therefore, the Committee's report for 1960 will deal primarily with final results of AMEF activities in Missouri during the preceding year, 1959.

During 1959, over-all participation of Missouri physicians in contributing funds for American medical schools increased 18.5 per cent. The number of doctors who contributed to the American Medical Education Foundation rose from 240 in 1958 to 312 in 1959. At the same time, 1,249 physicians sent gifts directly to medical schools, compared with 1,077 during the previous year. Combined figures for 1959 (contributors to AMEF and direct to schools) totaled 1,561, an increase of 244 over 1958.

Gifts to AMEF rose from $8,049 in 1958 to $11,435 in 1959, an increase of 48.2 per cent, while direct alumni gifts increased from $55,478 to $67,036, up 20.8 per cent. Total contributions from all medical sources in the state (physicians, the Woman's Auxiliary and local medical societies) climbed to $78,471 in 1959, or $14,946 above 1958 totals.

As in the past, the Woman's Auxiliary to the Missouri State Medical Association played an important role in raising funds for AMEF during 1959. Of the $11,435 contributed to AMEF that year, the Auxiliary raised about one fifth, or $2,493.

The preceding figures demonstrate that Missouri physicians gave increased support to the nation's 85 accredited medical schools in 1959. Missouri's three schools, however, received substantially more in AMEF grants than was contributed by Missouri physicians to the Foundation for, although we contributed $11,400 to AMEF in 1959, the Foundation distributed $34,897 to the medical schools at St. Louis University, Washington University and the University of Missouri.

Fifty year physicians were presented pins at the banquet.

A breakdown of the AMEF total (allocated during 1960) shows the following amounts received by the three schools: St. Louis University, $15,328; Washington University, $12,954, and the University of Missouri, $6,615. It should be noted that each of the schools received an unrestricted AMEF grant of $4,925, while the remainder of each school's total represents gifts specifically earmarked for that university by medical alumni.

The Committee, although conscious that improvement in physician support of AMEF is not only desirable but increasingly urgent, nevertheless finds cause for optimism in the results of the 1959 "Missouri AMEF Month" campaign. Participation, for example, increased by 30 per cent compared with 1958, and actual physician giving to AMEF (excluding funds raised by the Woman's Auxiliary) rose 71.7 per cent, increasing from $5,206 in 1958 to $8,843 in the succeeding year. This averages $41.21 per contributor.

One reason for this, likely, is a growing awareness on the part of practicing physicians of the threat of federal intervention and control of medical education. Still another factor which undoubtedly helped the 1959 AMEF drive was a return by the Committee to direct mail solicitation of gifts, with activities concentrated in a month-long campaign during October.

Nationally, the AMEF reported that grants distributed to medical schools by the Foundation totaled $1,198,335 from 1959 gifts. In addition, doctors contributed $3,157,-

073 directly to their alma maters, or a combined gift to medical education of $4,355,408.

Organized medicine's support of American medical institutions serves as a stimulus for private gifts from nonmedical sources. According to a recent report issued by the National Foundation for Medical Education, philanthropic businessmen and private foundations joined in the drive to underwrite American medical schools by contributing a record $3,207,141 in 1959. This money, coupled with AMEF funds, meant that last year (1960) the schools received an unprecedented total of $7,562,549 from these two sources.

JAMES P. MURPHY, Chairman,
HUGH E. STEPHENSON,
WILLIAM T. MCNEW,
RUSSELL D. SHELDEN,
ALLEN I. HERMAN.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Special Committee to Study the Councilor Districts and Representation, W. F. Francka, M.D., Hannibal, Chairman, follows:

REPORT OF THE SPECIAL COMMITTEE TO STUDY THE COUNCILOR DISTRICT SET-UP

This Special Committee, appointed by the President in compliance with a resolution adopted by the 1960 House of Delegates, makes the following recommendation:

"That St. Louis County be established as a separate Councilor District to be known as the 11th Councilor District and that the Constitution be amended so that the number of Councilors be increased from 10 to 11."

All members concurred in this recommendation except Dr. Richard H. Kiene.

W. F. FRANCKA, Chairman,
H. E. PETERSEN,
ROBERT B. BASSETT,
JOHN F. PEARL,
J. L. WASHBURN,
ROY PEARSE,
RICHARD H. KIENE,
KENNETH GLOVER,
JAMES D. BUTTS,
W. D. ENGLISH.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-Laws.

The report of the Special Committee of the Council on the Public Service Program, R. O. Muether, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLIC SERVICE PROGRAM

It will be recalled that the 1960 House of Delegates adopted a resolution providing that "the Council be authorized and instructed to institute immediately an intensive program of public relations emphasizing the positive programs of the medical profession . . . and that each county medical society be urged to take immediate measures to institute on a local level through local press media an educational advertising program emphasizing the guarantee of Missouri physicians that no individual in this state shall be without the services of a doctor for the lack of financial resources."

At its meeting on the final day of the 1960 annual session the Council acted immediately to implement this resolution. An initial budget of $15,000 was appropriated to launch the new program, and a special committee of Council members was appointed under the chairmanship of Dr. Muether to set policies and guide the work. Members of the special Public Service Committee were, in addition to the chairman, Drs. Furlow, Summers, Tillman, Doyle, Hollweg and Dowell.

In practice, however, the entire Council at its regular meetings supervised all developments in the Public Service program. A summary follows.

The two essential elements of the resolution as adopted were: (1) The assumption that the doctors of medicine as a whole were as a matter of fact holding out a guarantee of medical service to all without regard to payment and (2) the assumption that they would wish to publicize this guarantee locally by advertising.

The two first steps taken by the staff were to explore these two assumptions. Some 30 or 40 physicians, largely in rural areas, were interviewed at length. It at once became apparent that individual practicing doctors had little enthusiasm for making an advertised guarantee of the availability of their free service. Two staff members visited the AMA in Chicago to find what had been done by other state and local societies in this general area. A detailed study was also made of advertising media and costs.

On the basis of the staff's analysis of the situation in the light of these studies, the Public Service Committee determined that the basic objective of the resolution—namely, to win a public opinion more favorable to the medical profession in the state—could not be achieved by direct and immediate means proposed in the language of the resolution. First, it seemed clear that most doctors did not favor advertising a blanket guarantee of service. Second, the cost of advertising to do an effective job would have been beyond the means of most local societies and equally beyond the resources of the Association. An indication of the costs of such advertising is attached.

It was, therefore, determined by the committee and the staff to see how the purposes of the resolution might be achieved by other means. As a basic guide, they adopted the essential principle that any plan aimed at publicizing "the positive programs of the medical profession" had to be based on real news of real programs, and that such programs had to be acceptable to individual county societies.

The immediate next step was to ask each county society in the state to appoint a public service committee of its own, through which the state committee might transmit for local consideration suggestions and programs for activities that would lay a foundation for constructive publicity to influence public opinion. Of the 52 societies in the state, 26 appointed such committees. At the same time, publicity activities at the state level were increased to the maximum possible, pending the fuller development of the program.

The objectives and elements of the program were restated to be:

—increased public awareness of the profession's promotion of better health care . . .

—strengthen public realization that physicians' services are available to all and available in emergencies . . .

—emphasize the efforts of the profession to assure adequate numbers and distribution of physicians . . .

—increase public recognition of the efforts of the profession to assure adequate care for the indigent and the aging . . .

The following steps were taken to implement the program as thus redefined:

1. *Publicity.*—News releases, generally well received, were made on the honors medical student award, the Missouri University preceptorship program, the AMEF campaign, the new student loan fund, the annual meeting of the Woman's Auxiliary, as well as a detailed account of the over-all Public Service Program for MISSOURI MEDICINE.

2. *Program Materials.*—For the reference of local society public service committees, materials were assembled from the AMA and other sources outlining possible ways to set up and operate an emergency call system and a guarantee of service program at the community level. AMA materials describing constructive national programs of medicine were screened for wider use in physicians' waiting rooms.

3. *Indigent Care Studies.*—With the cooperation of local society public service committees, questionnaire surveys were made of provisions and facilities for indigent and medically indigent patient care in the following counties (the studies were relatively extensive in the case of those first listed, and, as might be expected, relatively simple in the others): Adair, Boone, Clay, Clinton, Greene, Howard, Jasper, Pettis and St. Louis County. Also Crawford, Dallas, Henry, Hickory, Knox, Marion, Monroe, Montgomery, Nodaway, Polk, Putnam, Schuyler, Sullivan and Texas.

In general, these studies make it clear that much can be done at the local and community level—with increased application of county funds—in order to achieve significant improvements in local arrangements for the adequate care of the indigent, medically indigent and the aged.

4. *Directory of Health Resources.*—Detailed working plans have been completed, and the Woman's Auxiliary has undertaken the important task of assembling detailed information on the availability of all facilities, finances and services for health care in all areas of Missouri. When this work is complete, we shall have an excellent over-all picture of where the real problems are, and every physician will have a handy manual for his guidance in referring patients in need of particular kinds of care or help.

5. *Student Loan Fund.*—At its May 1960 meeting the Council voted an appropriation of $25,000 to establish a fund for loans to medical students who are residents of Missouri. Such a plan had been discussed originally in February 1960, and it was felt that this would be an important element in the over-all Public Service program. The Council has supplemented its initial grant of $25,000 to the fund by a second grant of the same amount. A questionnaire survey has been made of all other student loan funds supported by organized medicine in the state, and the suggestion was made to local society public service committees, in the three societies which have funds in existence, that they increase efforts to publicize their programs.

CONCLUSION FOR CONSIDERATION OF THE HOUSE OF DELEGATES

At its December meeting, the Council considered the over-all policy of the Association in regard to care for the aged and the indigent in the light of the newly enacted Kerr-Mills law and pending legislation of the Forand type in Congress.

For the consideration both of policy and of cost, the Council voted to discontinue the Public Service Program as such, though more intensive efforts in the area of publicity are to continue as is the Auxiliary's work in compiling the Directory of Health Resources. The Association's support of the student loan fund has been increased. Local society public service committees continue in existence.

The budget provision for public relations services has been reduced to the $9,000 yearly figure that was in effect before the initiation of the Public Service Program. In the months that program was fully active, expenditures for public relations services were authorized at an annual rate of twice this figure. The total cost of the Public Service Program from the last annual session through December, 1960, was $9,590.21, including all fees and expenses.

This detailed report to the House aims to make it clear to delegates how elements of the Public Service Program evolved and how the program was carried forward in response to the resolution of the House last year.

The situation now appears to be this: If there is to be a major public relations effort to improve public understanding of the medical profession in Missouri, there will need to be definite action programs at both state and local levels. Something can be done with publicity alone based on our existing programs. If more public relations effort is to be worthwhile, however, it must be based on further soundly conceived action programs by which organized medicine in the state will take the lead in improving facilities and arrangements for indigent care and in urging more adequate financial support at the county level.

In the long run it is certain that, if care for the indigent and aged is paid for more and more by state and, then, federal governments, the trend is bound to continue away from the practice of medicine as we know it. The only ultimate solution is for the local community, the family, neighbors and local government to take on the job.

The question for the House is to consider whether it is the task of organized medicine in Missouri to try to lead a trend back to local responsibility; whether it is practical to try to do so now that the opposite trend has gone so far; whether the now discontinued Public Service Program was headed practically speaking in the right direction; whether any real results could be expected from this program or any like it; whether MSMA and local societies can afford the money it will take, and, finally, whether individual doctors can afford the time to give the interest and the effort on which the success of any such program must ultimately depend.

Footnotes: Public Service Program

ADVERTISING COSTS

Newspapers

One-column, one-inch ad in each of the newspapers in Missouri—one insertion	$ 278.43
One-column, one-inch ad, all newspapers, once a month	$ 3,341.16 per year
Two-column, five-inch ad, all newspapers, one insertion	$ 2,784.30
Two-column, five-inch ad, dailies only, once a month	$11,695.20 per year
Two-column, five-inch ad, all newspapers, once a month	$33,411.60 per year

(Two-column, five-inch ad would be minimum effective size—use of weeklies in most outstate areas would be difficult to avoid.)

(Figures include space costs only—productions costs would be in addition.)

Radio

(As an example, figures are given for the five major St. Louis stations only. Radio time costs vary widely with the station, time of day, frequency of broadcast during the week, number of weeks contracted for and other factors. For comparison purposes—there are some 78 commercial AM radio stations in Missouri.)

Five St. Louis radio stations—20-second and 1-minute spots—broadcast three times per week—Class "A" (good to excellent) time:

	20-seconds	*1 minute*
Per announcement (5 stations)	$ 144	$ 201
Per week	$ 432	$ 603
Per year	$22,464	$31,356

(Figures include time costs only—production costs in addition.)

Television

As an example, figures are given for the *three* St. Louis network stations only. Television time costs also vary widely with the station, time of day, frequency of broadcast, etc. For comparison purposes—there are about 17 commercial television stations in the state.)

Three St. Louis TV stations—one minute spot—broadcast three times per week—7 to 10:30 p.m.:

Per announcement (3 stations)	$ 958.00
Per week	$ 2,874.00
Per year	$149,448.00

(Figures include time costs only—production costs in addition.)

It should be recognized that among the essentials of effective advertising are frequency and continuity. The preceding figures are not intended as recommendations as to size of ads, frequency of use or selection media. They serve only to provide a quick impression of some of the costs involved in an advertising campaign. Recommendations for an effective campaign would most certainly include use of larger space ads, and for radio and television, much more frequently scheduled announcements on many more stations. Production costs would add an appreciable expense figure.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Special Committee on Corporate Practice, J. H. Summers, M.D., Lebanon, Chairman, follows:

REPORT OF THE SPECIAL COMMITTEE ON CORPORATE PRACTICE

Pursuant to the action of the House of Delegates at the 1960 Session, the special Committee on Corporate Practice during the year has attempted to initiate the wide-scope study of corporate practice in Missouri envisioned in last year's report of the Committee to the Council and the House.

This study was to encompass such elements as the extent, patterns and trends of corporate practice in the state, the impact of such practice on patients, institutions and medical practitioners and identification of particular instances of corporate practice actually in existence.

The intent was to engage an outside research organization experienced in social research to undertake the study.

A number of research organizations have been investigated in the past months, with disappointing results.

Typical of these was a nationally known research firm in St. Louis which decided that such a study would not be feasible for its organization to undertake since the skills and experience called for are unusual and not readily available to them.

Other types of organizations were also contacted, including those in the accounting and management fields. These in general felt that they could not make such studies for the Association without concurrent invitations from the governmental bodies, institutions and organizations which might be involved.

While university social science groups had also been suggested as possibilities in undertaking the study, there is doubt on the part of the Committee that such an agency could effectively be utilized.

Through these experiences, it has now become the sense of the Committee that the best way to proceed is to invite directly the views of the members of the staffs of certain of the institutions felt to have elements of corporate practice in their activities as to what patterns and degrees of corporate practice are compatible with the private practice of medicine.

Hotel Muehlebach

Dr. Mixson, Vice Speaker, presided at some of the session.

Preliminary work has been done toward this end, and the Committee is prepared to launch this phase of study in the near future.

J. H. Summers, Chairman,
R. O. Muether,
Ralph Perry,
H. W. Benoit,
John P. Ferguson,
Joseph L. Fisher,
Robert W. Kelley,
Emmett B. Drescher,
John J. Modlin.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Council, Donald M. Dowell, M.D., Chillicothe, Chairman, follows:

THE COUNCIL

Meeting of March 16, 1960

The Council met at the Sheraton-Jefferson Hotel following the session of the House of Delegates on March 16, 1960, Dr. R. O. Muether, President, presiding until the Chairman of the Council was elected. Those present were Drs. Muether; Donald M. Dowell, Chillicothe; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; J. H. Summers, Lebanon; Messrs. Lemoine Skinner, Ray McIntyre, Tom R. O'Brien, and Helen Penn, St. Louis.

OFFICERS ELECTED

The following officers were elected: Chairman of the Council, Dr. Donald M. Dowell, Chillicothe; Vice Chairman of the Council, Dr. Ben M. Bull, Ironton; Secretary, Dr. John I. Matthews, Jefferson City; Treasurer, Dr. Charles R. Doyle, St. Louis.

PUBLIC SERVICE

The resolution adopted by the House of Delegates proposing stepped-up public information on medical services was discussed. On motion of Dr. Furlow, it was voted that an appropriation of not more than $15,000 be made available in the next six months for study and implementation of the work.

MENTAL HEALTH

It was announced that Dr. Duval had called a conference on mental health for this fall and had asked the support of the Association. It was suggested that he meet with the Committee on Mental Health, and through that Committee with the Council.

CORPORATE PRACTICE

The following committee to study corporate practice was appointed: Drs. J. H. Summers, Lebanon, Chairman; R. O. Muether, St. Louis; Ralph Perry, Kansas City; H. W. Benoit, Kansas City; John P. Ferguson, Springfield; Joseph L. Fisher, St. Joseph; Robert W. Kelley, St. Louis; Emmett B. Drescher, St. Louis; and John J. Modlin, Columbia.

NEXT MEETING

The next meeting of the Council was set for May 21 and 22.

Meeting of May 21-22, 1960

The Council met at Hotel Chase, St. Louis, May 21, 22, 1960, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; John I. Matthews, Jefferson City; Vernon E. Wilson, Columbia; Messrs. T. R. O'Brien, Ray McIntyre, Lemoine Skinner, Jordan Singleton, Gene Lunn and Miss Helen Penn, St. Louis; John R. Buckner, Springfield; Hollister Smith, and E. J. Mothershead, St. Louis; W. H. Bartleson, Kansas City. For portions of the meeting in attendance were Dr. Paul Max, St. Louis; Mr. Norris Allen, St. Louis; Dr. H. M. Hardwicke, Jefferson City; Dr. Addison M. Duval, Jefferson City; Dr. James Haddock, St. Louis; Dr. Earl Loyd, Jefferson City; Dr. Robert Tanner, Jefferson City; Messrs. Hubert Harris and J. O. Talley, Jefferson City.

MINUTES

Minutes of the Council meetings of March 13 and 16 were read and approved.

9TH DISTRICT COUNCILOR

On recommendation of the delegates of the 9th Councilor District, Dr. E. A. Stricker, St. James, was appointed to serve as Councilor from that district until the next Annual Session, on motion of Dr. Whitener.

NATIONAL SOCIETY FOR MEDICAL RESEARCH

A request from the National Society for Medical Research for the customary gift of $50.00 toward its work was presented. It was stated that a bill on animal experimentation was under consideration for introduction into Congress. While the Society opposed the bill, it was felt that it might bring clarification on antivivisection matters. It was reported that Sen. Symington originally was going to sponsor the bill but had withdrawn his sponsorship. On motion of Dr. Tillman, it was voted to make the contribution.

STUDENT A.M.A.

It was announced that a request had been made from the University of Missouri Student A.M.A. that assistance be given again this year in sending a delegate to their national meeting. It was stated that $75.00 was offered and on motion of Dr. Tillman, this was approved.

MD

It was announced that on May 27 "MD," of the March of Medicine series, would be presented at 9:30 p.m. on the NBC network.

ST. LOUIS MEDICAL SOCIETY MEMBERSHIP

Mr. O'Brien outlined correspondence relating to a membership problem in which a member of the St. Louis Medical Society desired to be a member of that Society but not the State Association nor the A.M.A. Mr. O'Brien reviewed the action of the House of Delegates of MSMA on April 21, 1903. Prior to that time, the Judicial Council of the Association, whose chairman was Frank J. Lutz, M.D., a member of the St. Louis Medical Society, had submitted a report and a revised Constitution and By-Laws to all of the county societies for their approval. This report and By-Laws stated that all members of component societies were members of the Association. A list of societies, including St. Louis Medical Society, had approved the report and the new By-Laws. It was pointed out that the present By-Laws of the Association and those of St. Louis Medical Society included such provision.

Dr. Furlow introduced Dr. Max, President of the St. Louis Medical Society, and Mr. Norris Allen, attorney for the Society. Mr. Allen said that he had checked with the Secretary of State and found that both bodies are legally incorporated and that it seemed that such incorporation allowed difference in membership.

Dr. Max said that a bequest that had been made to St. Louis Medical Society was about to be federally taxed and a division of membership in the two organizations might help their tax situation.

After further discussion, on motion of Dr. Furlow, it was voted to defer further discussion until a later meeting after further study had been made.

TREASURER'S REPORT

The Treasurer's report was presented, showing that the activities of the Association were within the budget.

PUBLIC SERVICE PROGRAM

Dr. Muether gave the following report for the special committee of the Council of a proposed "Public Service Program."

Distribution of Mimeographed Program Plans, Including Copies of Staff Section

This was the original draft of the elements of the program as suggested by the committee as a basis for investigation with various individual physicians throughout the state in order to test the reaction of the membership.

As a result of these discussions, some modification of the plan seems desirable.

The program as originally suggested has four main elements:

(a) Organization on a local level—and then publicizing—a guarantee that physicians' services are available to all, without regard to the ability to pay.

(b) Organization of a formal emergency call system in each community, with suitable publicity of the service.

(c) Local and state directories of health resources for the information principally of physicians seeking special services for indigent patients.

(d) Gathering of information and publicizing the medical profession's support of medical education and adequate distribution of physicians.

The last two elements seem to present no basic problems in accomplishment.

Establishment of formal emergency call systems, however, apparently will present difficult problems in many parts of the state—and the guarantee of service element presents even greater difficulties.

In attempting to determine the possible reaction of individual physicians and local societies, the elements of the suggested program were discussed with some 30 physicians, representing 12 different local medical societies and 18 localities. Communities involved ranged from towns of less than 1,000 population to outstate cities of 50,000 and more.

Dr. Vernon Luck was presented the University of Missouri alumni award.

In brief, the reaction to the guarantee of service program in general was one of resistance. Even those who felt that publicizing such a guarantee was a good idea were not realy enthusiastic about it.

Basically, although feeling that medical care was available to anyone who needed it, most men felt that publicizing the guarantee would create a number of problems for local physicians, and that such a program would carry a grave risk if, through misunderstanding or lack of full cooperation, instances arose in which it did not work perfectly.

In connection with emergency call systems, local conditions of number and distribution of physicians, geography, location of medical centers, etc., would probably preclude the establishment of a formal system in a number of societies. In others, usually larger, specialization creates a problem, since men in certain specialties may not be willing to take calls on cases that might be foreign to their usual range of care. In perhaps the majority of communities, however, a formal emergency call system could be set up without too much difficulty, since informal arrangements already exist. All that would be needed in such cases would be formalization of the system by the local society and publicity.

The apparent reluctance of many of the physicians with whom the program was discussed to endorse publicizing of a guarantee of service, and the local conditions preventing establishment of emergency call systems in some communities does not necessarily mean that these two elements need to be dropped from the public service program. The suggestion can still be made to all local medical societies that they develop and implement such arrangements if they feel they would be practical, workable and of public relations value. They can be urged, in particular, to investigate the possibilities of establishing formal emergency call systems.

The reactions of many of the physicians interviewed do make it appear, however, that guarantee of service and emergency call systems should not be depended upon as the cornerstones of the public service program. It seems apparent now that we cannot realistically expect to see these two elements operate state-wide.

At the same time, the discussions with physicians from different areas of the state brought out a number of suggestions which might be effective in the final form of the public service program to be proposed to the local societies. Several counties, by public action, have taken definite steps to solve the problem of medical care for the indigent. In Pettis County, a full scale program has been developed through the efforts of the medical society involving not only the practicing physicians but the hospital, retail druggists, the welfare department, a county physician, all backed by the county court. In DeKalb County, a county nursing home has been built to take care of a great deal of the problem. Madison County is building a county hospital with nursing facilities. A number of counties have county physicians on one basis or another.

The objectives of the public service program remain recognized and valuable. The program should be realistic and practical, however, and the committee and the Council should consider a number of possible ways of going forward in the light of the House of Delegates resolution. Since there seems to be enough resistance to the guarantee of service program and even emergency call systems to raise the question of changing the emphasis, at least, on these elements, perhaps the solutions that various counties have worked out should be studied further. Case histories and reports could be prepared and presented to all local societies and meetings arranged for interchange of information and ideas among societies in similar circumstances. All societies could then be urged to undertake an active program in their communities, adapting the parts of programs that have been effective for others to their own needs. On a state level, assistance would be provided in the planning, organizing and carrying through of the local programs and in publicizing the efforts of the local physicians to provide for the needs of the community.

Cost of advertising were discussed and a list of advertising rates in papers in the state were given to appropriate Councilors. It was pointed out that the cost of insertion of a one inch ad in every paper in the state would cost $287 per insertion; that a two column by

5 inch ad would cost $2,700. It was estimated that telephone directory costs would be about $12,000 a year. It was pointed out that in many cases telephone companies would be glad to cooperate with societies on emergency calls.

Following the request for county societies to appoint a committee, nine out of 52 have done so, so far.

Mr. Singleton reported on conferences with physicians from various parts of the state and said that a great deal of concern was expressed that they feared that a guarantee for giving care would be abused and would make it impossible to give as good care as at present. He said that the specialist was fearful of emergency service because it is often completely out of his line. The way such service is handled was reported from several districts by Councilors but it was stressed that the program would be a triad, the state, county and individual physician, the physician being the most important link. It was pointed out that "emergency" has a different meaning for the lay and for physicians. It was pointed out that during the war years, the lay public cooperated well with physicians and that probably more lay education was needed today.

It was suggested that since the emergency guarantee originated in California, that information might be obtained on that. No action was taken but the consensus was that advertising was impractical and unnecessary, but that further study and work should be done on the program, letting the activities of successful societies be known by other societies.

CONFERENCE ON AGING

The various meetings that have been held over the state were reviewed briefly as the Committee on Aging had reported in full at the last meeting of the Council. It was said that one or more physicians were at all community conferences and that in several the Forand Bill was not mentioned. Dr. Hardwicke, state chairman of the task force on medical care, said that there might be a minority report from some within his group. He said that the report had been written but had not been unanimously approved as yet. He called attention to the state conference in Jefferson City on July 8 and 9, and asked that physicians be at that meeting.

PAYMENT FOR V.D. TREATMENT

Dr. Hardwicke announced that there had been some protest over the nonpayment for treatment of venereal disease and in some cases there was difficulty in obtaining information from the physician and that the number of reported contacts declined by 39 per cent since the change. He read a letter from the Pemiscot County Society asking that payment for treatment be reinstituted. On motion, this matter was referred to the Committee on Control of Venereal Disease.

The retardation of children from diet deficiency was discussed, following up discussion at the previous Council meeting. On motion of Dr. Stuart, this was referred to the Committee on Infant and Child Care.

MATERNAL WELFARE

Dr. Hardwicke said that the Chairman of the Committee on Maternal Welfare would like for him to call a meeting with the chairman of a similar osteopathic committee to determine if better reporting might be accomplished. On motion of Dr. Tillman it was agreed that Dr. Hardwicke should call such a meeting.

DRUGS

The over prescription of certain drugs was discussed and it was felt that this was a problem for the Board of Licensure.

MENTAL HEALTH

Dr. Duval gave a progress report for the Division of Mental Diseases. He asked for the support of the Association in his work in trying to bring Missouri from its present standing in the field of mental health to a higher position. He said that about half of the necessary staff for the central office had been obtained. He discussed the overcrowding of hospitals; the attempts to make treatment centers instead of custodial institutions; the difficulty of staffing hospitals; the need for treatment of children and the institution of beds at the Fulton Hospital for younger children and in the St. Louis Hospital for teen age children; the need of change in allowing the return of children to reformatories and of individuals to prisons; hopes to set up community psychiatric clinics which will ultimately be taken over by the community; the possibility of the Division of Mental Health having departmental status. He discussed the situation of the foreign born physician who has not obtained citizenship filling the needs of the system. He said the two basic concepts were modern care and treatment and work in prevention of mental illness.

Dr. Stricker made presentation to Dr. Summers from the Mid-Missouri County Medical Society.

AGENCIES REQUESTING DIRECT REPORTS

Correspondence between the State Rehabilitation Agency and the Missouri Welfare Department with Dean Wilson was presented. Dr. Tanner and Mr. Harris, representing the Missouri Welfare Department, presented their difficulties in obtaining medical reports directly from the Medical Center at Columbia while they could from other hospitals in the state. They said that often the physician is not the family physician and does not wish to be concerned with the follow-up report.

It was pointed out that Dr. Wilson was following a code that had been set up at the opening of the hospital which directed that reports go only to physicians.

Dr. Earl Loyd and Mr. Talley, representing the State Rehabilitation Agency, explained their difficulty which was similar in that they wished to receive reports directly to be more sure of having them and to save time in receiving them. They said that between 800 and 1,000 cases were being adjudicated a month. (It was pointed out that the law will probably be changed so that O.A.S.I. benefits will not be restricted to disabled persons over age 50 and that the volume of work will be increased.) They pointed out that the individual is responsible for proving his disability and that often some of this information was obtainable from hospital records. Following the discussion by the guests, these problems were discussed in the Council and upon motion of Dr. Barger, it was voted to suggest that a waiver form be made a part of the first communication from the physician and that this would authorize the Medical Center to provide medical records to these agencies.

BUREAU OF BLIND

In the discussion it was brought out that the Bureau for the Blind requires its work be done by a qualified ophthalmologist and that referrals are made to recognized ophthalmologists and to Washington University or the University of Kansas in certain instances. After discussion, on motion of Dr. Barger it was voted that direct referral was disapproved in cases in which a qualified ophthalmologist was available but that in other cases, patients could be referred directly to the Medical Center.

LEGISLATION

Mr. O'Brien reported that the suggested medical examiner's law was being studied. The bill on licensure of physical therapists has been referred to the Committee on Physical Medicine and Rehabilitation. The two items referred by the Missouri Academy of General Practice are being studied.

On the national level, Mr. O'Brien reported that the Ways and Means Committee of the Congress on May 18 had voted 13 to 12 recommending that a bill be drafted as a modification of the Eisenhower bill. Such a bill will be introduced within a week and is to be acted upon by the Committee May 26. It appears at present that if the Keogh bill is passed, it will also cover doctors' assistants.

DISCUSSION WITH OSTEOPATHS

It was announced that the Osteopathic Association had asked for consultation with the Association and that the committee of osteopaths was composed of seven members while the Association committee is five. On motion of Dr. Hollweg, Drs. Perry and Francka were added to the committee.

COMMITTEES

Dr. Muether appointed the following Committee on Redistricting: Dr. W. F. Francka, Hannibal, Chairman; H. E. Petersen, St. Joseph; Robert B. Bassett, St. Louis; John F. Pearl, St. Clair; J. L. Washburn, Versailles; Roy Pearse, Nevada; Richard H. Kiene, Kansas City; Kenneth Glover, Mount Vernon; James D. Butts, Rolla, and W. D. English, Cardwell. Dr. Muether appointed Dr. Martin P. Hunter, Kansas City, to the Committee on Medical Economics, and Dr. Ralph Perry, Kansas City, to the Committee on Hospital and Professional Relations. On motion of Dr. Muether, these appointments were approved.

STUDENT LOAN FUND

Dr. Tillman asked for reopening of the discussion of a loan fund at the last Council meeting. After discussion, on motion of Dr. Whitener, it was voted that $25,000 be earmarked for loans to medical students who are residents of Missouri. An amendment to restrict these loans to use in Missouri schools only failed to pass. The possibility of using a Medical Education Foundation separate from the Missouri State Medical Association was suggested.

FEDERAL EMPLOYEES

It was called to the attention of the Council that the law which will give health insurance coverage to federal employees will go into effect July 1 and that employees will have a choice between Blue Cross-Blue Shield or a commercial insurance program.

CANCER DEMONSTRATION

Dean Wilson and Dr. Hardwicke called attention to a program they wish to institute, of teaching practitioners various technics in connection with cancer and that to obtain matching funds it was necessary to have the approval of the Association. On motion of Dr. Stuart, this approval was voted.

ANNUAL SESSION

The following report was given by Dr. Matthews and tabulations on the survey were presented to members of the Council.

Over-all, the questionnaire on the 1960 Annual Session drew an excellent response, both in the numbers of questionnaires returned and the completeness of the answers. The total mailing was 3,750, of which 961 were returned by the cutoff date of April 11. This is a 25.6 per cent return.

For those attending, 191 questionnaires were returned, for a 34.2 per cent response. For those not attending, there were 770 questionnaires returned, a 24.2 per cent response.

Replies were classified by those attending and those not attending, by location of practice (metropolitan, outstate city and smaller town), by general or specialty practice, and by length of time in practice.

The make-up of the respondents by location was about 60 per cent metropolitan, 15 per cent from outstate cities, 25 per cent from smaller towns.

By type of practice—58 per cent of those attending were specialists, 65 per cent of those who did not attend are in specialties. The meeting attracted more specialists than general practitioners, and probably a higher proportion of the total number of specialists in Missouri.

Attendance

A breakdown in the number of days respondents stayed at the meeting shows that men from smaller locations tend to come and stay, while those from the home metropolitan areas may come in for one or two things on the program. Aside from the effect of this, the greatest number of people stayed for two days. A very significant number, however, stayed for the full three or four days.

Those in general practice seem to stay longer than specialists. The greatest number of general practitioners stayed three days, while the greatest number of specialists come for one day or two.

Attendance by age (years of practice) shows good representation. The attendance of the younger men, in the 1-10 years of practice group is very good.

Both those who attended and those who did not were asked to estimate how long they ordinarily could spend at the meeting. The majority say three days, although almost as many say two days.

Results for the attending and non-attending groups were somewhat different as to the most convenient three consecutive days for the meeting.

For the attending group, Sunday, Monday, Tuesday are by far the most popular days, with about 48 per cent of the vote. These three days ranked as a second choice, however, for those not attending.

Monday, Tuesday, Wednesday—the present time of the scientific program—was second choice for the attending group with about 25 per cent of the vote. These days were third in popularity with those not attending.

Thursday, Friday, Saturday come in third among those attending, with about 14 per cent of the vote—but the same three days were first choice among those not attending.

A complicating factor in making a change in the present arrangement is the fact that Saturday, Sunday, Monday are the three most unpopular days from both groups with Wednesday, Thursday, Friday almost as unpopular. In view of the relatively high vote for the present three days, and the apparent vote against beginning the meeting on either Saturday or Wednesday, it might be best to maintain present arrangements so long as the House of Delegates convenes on the day preceding the scientific program.

As to the most convenient time of the year for the meeting, spring is the overwhelming choice.

Content

The questionnaire included a list of program events and respondents were asked to circle those which they would like to see more of on the program. Opportunity was also provided to indicate what things the respondents would like to see less of.

It should be pointed out that the question pertained to inclusion of more of the things listed. Because a particular feature did not receive many mentions, or appears at the bottom of the list in frequency of mention, does not necessarily mean that the respondents want the feature eliminated entirely. It may simply indicate that the respondents feel that the amount now given is at about the right level—they feel it should be on the program, but not in any greater amount. This is borne out by the fact that very few answers were received to the question "Meetings should include fewer" and that the answers that were received were quite general and did not usually pertain to content of the scientific program.

Responses were arranged by frequency of mention for each of the three location categories for both the attending and non-attending groups. This gives a total of six lists. The five features mentioned most frequently and the five mentioned least frequently were then determined.

More panel presentations and more refresher courses appear on all six of the high mention lists.

More medical economics, more medico-legal subjects and more specialty group presentations all appear on five of the six high mention lists, while out-of-state speakers appears on three of the six.

At the other end of the scale, the things least frequently mentioned were recreation and social events, both on all six lists, CPCs and Missouri speakers, on five of the six, audience participation presentations, which appears on four of the six lists, scientific exhibits which appears on two while lectures and specialty group presentations are shown on one list each.

The idea of grouping program subjects by field of interest with, for example, all surgical presentations at one time, all OB-GYN at another, apparently would be most popular.

In general the answers concerning the content of the meeting indicate that the respondents want serious scientific programs of a practical nature given by well-known men, including additional information on both medical economic and medical legal matters.

This conclusion is further strengthened by the reasons given for attending the meeting. Scientific reasons lead by far over any other classification, and in fact, over all other reasons put together. (Other reasons, however, such as House of Delegates meetings, fellowship, recreation, etc., do account for a significant number of those who attend.)

Answers on reasons for attending indicate that members probably tend to see the program as a whole, rather than being attracted by any one particular event.

Reasons given for not attending by those who did not come tended to be quite general. Press of practice and not interested led in frequency.

Association Functions

One question was asked of those attending to gain some indication of interest in Association affairs. This was whether the respondent had attended any meetings of the House of Delegates or its reference committees. There was no way of determining how many of the respondents were actually delegates or officers themselves, but the answers showed that only about 50 per cent of the respondents went to meetings of the House or reference committees.

Summary

In general, the survey produced a good response and should be a good indication of opinion.

Most members stay at the meeting two days or longer and indicate they ordinarily can stay about three days. There seemed to be no widespread expressed demand to shorten the meeting to less than three days.

In view of the House of Delegates extra day at present, and unless the entire program, including the House, can be condensed into a three-day total, the present Monday, Tuesday, Wednesday arrangements for the scientific program would seem to be best. Spring is the best time of year.

Members' interest seems to be mainly in serious scientific education. They would like to see more practical presentations by well-known men and these grouped by field of interest.

Interest in the House of Delegates proceedings and Association affairs should be improved.

Finally, very little specific criticism was expressed, although we believe the opportunity was certainly available.

An outline showing the proportion of business and scientific sessions was presented.

After discussion, several actions were taken.

It was voted that the Council should bring to the attention of the Speaker of the House that alternate delegates might be seated by a majority vote of the House.

It was voted that the last session of the House be a breakfast meeting on Wednesday morning.

It was voted that there be a dinner for Presidents and Secretaries of County Medical Societies and new members and their wives on Sunday evening as guests of the Association, the dinner to be open to any others on a subscription basis.

MENTAL HEALTH

Dr. Haddock presented the following report of the Committee on Mental Health:

The Committee on Mental Health met at the Missouri Hotel, Jefferson City, April 10, 1960, with James N. Haddock, M.D., Chairman, Clayton, presiding. Those present were: Drs. Haddock, Robert J. Mueller, St. Louis; Henry Guhleman, Jefferson City; George W. Forman, St. Joseph; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Frank M. Grogan, St. Louis; N. Venay Bolin, Kansas City; James M. A. Weiss, St. Louis; Addison M. Duval, Jefferson City; Messrs. T. R. O'Brien and Jordan Singleton, St. Louis, and Helen Penn, St. Louis.

Dr. Addison M. Duval, Director, State Division of Mental Diseases, was invited to meet with the Committee to give a report on the state program to date, as well as plans for the future.

Division of Mental Diseases

Dr. Duval reported on the progress of setting up the central office for the Division, saying that there had originally been only one secretary and the former director. The projected setup will include 23 people and at the present time there is about half that number. He said the central office is divided into the division of medical service and division of administration. He said that salary limitations, other than for medical personnel, had made obtaining of personnel slow, such limitations applying not only in the Division itself but to salaries in other offices of the state. He said that present quarters are inadequate and unsuitable and that a new building on a rental basis was under consideration. He reported that monthly meetings are held with the Department of Welfare and the Division of Health.

Child Care

Dr. Duval said that the law requiring hospitals to accept children from the juvenile court was effected before the hospitals were ready to accept them but that now 200 children are in residence in state hospitals, which is capacity. A study on evaluation and short term treatment is under way in the Fulton Hospital where 100 children are. Younger children are placed in the Fulton Hospital and it is proposed that teen age children be placed in the St. Louis Hospital. A conference on April 20 will try to clarify what care can be given children in the state hospitals, and the role of state, county and city in their care. The hope is for three hospitals for children, one in St. Louis, one in Kansas City and one at the University of Missouri. Dr. Duval said that this would require legislation.

Retarded Children

The situation on retarded children in the state was discussed. Dr. Duval said that the new Higginsville school will have capacity for 450 patients and that rehabilitation is being done there, but that the Carrollton school with 100 patients is a chronic domiciliary situation. He said the conditions in St. Louis and Marshall are extremely bad but that the school in Marshall is improving. He estimated that 2,200 additional beds for retarded children were needed. A school for retarded children to be erected in the southern part of the state is under consideration.

Hospitals

Dr. Duval said that there formerly had been no communication between the state mental hospitals. He said that in the last fiscal year there had been a 3 per cent increase in the rate of discharge but that so far this year the rate was 26.9 per cent greater than last year. The removal of certain patients to nursing homes was a factor in this. He said that 200 patients had been moved into nursing homes since August 29 and that possibly there are 1,500 patients that could be moved. He said that the Fulton Hospital had placed more patients in nursing homes than the other hospitals. He said some resistance is being met and that consent of the family is required. He said that at the Farmington Hospital, examination of patients is being done before entrance to the hospital and that indications are that from 40 to 50 per cent of patients can go directly to nursing homes. He said that the inpatient load in hospitals is decreasing though admissions are increasing.

Legislation

Dr. Duval said that he was working with Mr. Smith of the Commission and Senator Spradling on legislation and that the legislative research group is studying needed legislation. Among desirable and needed legislation, Dr. Duval listed the possibility of the Division of Mental Disease being separated from the Department of Public Health and Welfare and becoming a new Department of Mental Health; setting up of community psychiatric programs with clinics; the transfer of non-mental patients to reformatories; provision for returning sex psychopathic individuals to prisons, and abolishing the provision for the county paying for county patients in state hospitals at the rate of $6 per month since this provision is being abused in that patients that could pay for private care are being declared indigent; the adequacy or desirablity of the present travelling clinic program was questioned, and it was thought that all purpose community clinics would be more desirable.

Dr. Muether made presentations from AMEF to the deans or representatives of the three medical schools.

General Needs

Among general needs that the division faces, Dr. Duval named the 118 per cent overcrowding in St. Louis; the shortage of professional treatment staff; improvement of the security section at Fulton; research and training needed; architectural survey to determine what buildings need to be replaced and what repaired; central purchasing.

Conference

Dr. Duval announced a state-wide mental health conference on September 8 and 9 and asked for two delegates and two alternates from the Association. He said approximately a hundred will be asked to the conference representing state-wide organizations and individuals interested in mental health programming. He said that the ten-year plan would be presented at the conference, which will be both a full conference and workshop sessions.

Blue Cross

It was pointed out that a rider had been added to the St. Louis Blue Cross contract giving more allowance for mental health care and that the major medical contract now available in St. Louis does give increased coverage for psychiatric care.

Medicare

It was announced that mental health care had been restored to the Medicare program, effective January 1, 1960.

RESOLUTION ON HOSPITAL RECORDS

The following resolution concerning hospital records as passed by the House of Delegates was read as follows:

Resolution Re: Joint Commission on Accreditation of Hospitals

Whereas, There are duplications as indicated by the attached forms, on hospital records, which are required under the regulations of the Joint Commission on Accreditation of Hospitals, that necessitate redundant and duplication procedures by staff physicians, and

Whereas, An investigation study to ascertain wherein these circumstances exist and the adoption of indicated revisions in the regulations by the Commission, would be welcomed and beneficial to the staff physicians, therefore, be it

Resolved, That this House of Delegates instruct its delegates to the House of Delegates to the American Medical Association to introduce a resolution that will express to the Joint Commission on Accreditation of Hospitals, our physicians members' sincere objection to unnecessary and redundant duplications of informational procedures which appear on the prescribed forms for hospital use, and, be it further

Resolved, That the Joint Commission on Accreditation of Hospitals be urged to promptly conduct a national study to evaluate the efficiency of present hospital records which are required to be executed by physicians, with the objective and purpose of eliminating all nonessential duplications in hospital records.

On motion of Dr. Stuart a suitable resolution to be submitted at the coming A.M.A. meeting by our delegates, was approved.

PRIVATE FLYERS

A resolution asking reversal by the A.M.A. House of Delegates on restriction of examination of private aviators was presented as follows:

Resolution Re: Medical Examiners Designated by the Federal Aviation Agency

Whereas, The House of Delegates of the American Medical Association, at the Interim Session in Dallas, Texas, 1959, adopted a statement that, "Examinations to determine the physical and mental fitness of Aircraft crew members should be made by Doctors of Medicine with special knowledge and proficiency in certain techniques"; and

Whereas, This statement is contrary to the long standing principle of free choice of physician; and

Whereas, The Federal Aviation Agency, as a direct result of this A.M.A. statement, has issued an order to be effective June 15, 1960, such order having been published in the Federal Register for May 6, 1960, that physical examinations of Class 3 plane pilots must be performed by Doctors of Medicine who are designated as examiners by the Federal Aviation Agency; therefore be it

Resolved, That the House of Delegates of the American Medical Association be requested to rescind this action, and be it further

Resolved, That the Federal Aviation Agency be requested to rescind its order, as published in the Federal Register, May 6, 1960, that physical examinations of Class 3 plane pilots must be performed by physicians designated by the Federal Aviation Agency.

On motion of Dr. Stuart, this resolution was approved for Missouri delegates to present to the A.M.A. House.

BOARD OF TRUSTEES

A letter from Dr. Victor B. Buhler urging support of Dr. Frank Coleman for A.M.A. trustee was read. On motion of Dr. Whitener it was voted to give this information to delegates but that they be uninstructed.

HOSPITAL COMMITTEE

Mr. O'Brien reported that there had been discussion concerning a liaison committee of the hospital and medical associations. After discussion it was decided that such a committee be appointed, to be made up of five persons, including the President, President-Elect, the Chairman of the Council, the Executive Secretary and two others. It was pointed out that this committee should be publicized so that physicians would know to whom to report hospital problems.

HOSPITAL STORY

Various activities in the state concerning the "Quest for Health" program were reported but no action was taken.

COMMITTEE

The Chairman said that Dr. Hardwicke had asked for a committee to review a guide which he is preparing for use of federal and state funds which will be presented to HEW. Dr. Muether moved that such a committee be appointed and the Chair appointed Drs. Matthews, Stuart and Barger.

FIELD SECRETARY REPORT

Mr. McIntyre reported on several conferences on aging which he had attended. He reported the opening of the General Pershing Memorial Hospital at Brookfield; the St. Louis Academy one day symposium on May 1 in St. Louis attended by 600; his and Dr. Tillman's talks before the Medical Assistants and Secretaries Society; the clinical conference at Missouri University on May 11 and 12; a meeting at Whiteman's Air Force Base attended by 125 persons, and conferences on the Public Service Program.

Meeting of September 24-25, 1960

The Council met at Hotel Chase, St. Louis, September 24, 25, 1960, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell, J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Joseph M. Krebs, Clayton; Richard Kiene, Kansas City; David E. Musgrave, Excelsior Springs; Glenn W. Hendren, Liberty; W. L. Sportsman, Kansas City; D. Elliott O'Reilly, St. Louis. Messrs. James W. Foristel, Washington, D. C.; Jack Buckner, Springfield; Wm. H. Bartleson, Kansas City; Hollister Smith, Lemoine Skinner, Jordan Singleton, Cene Lunn, Ray McIntyre and T. R. O'Brien, St. Louis.

EXECUTIVE SECRETARY'S REPORT

Mr. O'Brien reported on actions of the House of Delegates of the A.M.A. on two resolutions: (a) Rules of the Joint Commission on Accreditation regarding multiplicity of physician's reporting forms, which was adopted by the House, and (b) A resolution pertaining to Rules of the CAA whereby that organization appoints medical examiners for examination of private airplane pilots, which was defeated in the House of Delegates.

A report was given on the PR Conference held in Chicago, which was attended by Mr. O'Brien and Mr. Singleton, of the staff, and a number of members. Dr. Kendis, of St. Louis County Medical Society, participated in a panel discussion, explaining St. Louis County's new proposed program regarding reduced fees for needy aged patients.

Mr. O'Brien also discussed Governor Blair's Mental Health Conference which he attended along with Dr. Haddock, chairman of our Mental Health Committee. Topics discussed at this Conference were the problems of the State Mental Health Commission, and the 10 Year Mental Health Program. A meeting of our Committee on Mental Health will be held on October 16 to discuss this program and a report will be made to the Council at its next meeting.

Mr. O'Brien presented a resolution received from the A.M.A. regarding the National Foundation which states that local and state medical associations should attempt to have official representatives designated to serve on the board.

A second resolution from the A.M.A. suggested that more doctors take an active part in politics.

A third resolution from A.M.A. urges state and county societies to use material prepared by A.M.A. to encourage high school students to enter medical schools.

He also reported on coming meetings of the A.M.A.—one in November regarding the National Disaster Program and one in early January, the Annual Mental Health Conference, and requested that the chairmen of the respective MSMA committees involved be asked to attend and that their expenses be paid by MSMA. On motion of Dr. Furlow, duly seconded, this request was granted.

Mr. O'Brien also reported on the article contained in the October issue of *Harper's* magazine entitled, "A Crisis in American Medicine," a copy of which was available and passed around. It was decided that copies of the magazine should be purchased, or reprints ordered, so that each Councilor could have a copy.

TREASURER'S REPORT

Dr. Doyle reported on the financial standing of the Association and stated that we were running well within our budget at this time. He also reported on our investment program, and read a letter from our Investment Advisor, the Mercantile Trust Company, recommending that no changes be made in any of our investments at this time. On motion of Dr. Muether, duly seconded, the report was accepted.

PUBLIC SERVICE PROGRAM

Dr. Muether presented the following report on the Public Service Program:

Résumé of Program

This MSMA Public Service program has as its objective a broad and growing public awareness of the positive programs of medicine serving the public. The program specifically seeks to:

(1) Increase public awareness of the profession's promotion of better health care through the work of state and local committees, as, for example, Maternal Welfare, Mental Health, School Health, etc.

(2) Strengthen public realization that physicians' services are available to all and available in emergencies.

(3) Emphasize the efforts of the profession to assure adequate numbers and distribution of physicians.

(4) Increase public recognition of the efforts of the profession to assure adequate care for the indigent and the aging.

The program works to accomplish these objectives in two ways—through state and local publicity—and through providing assistance to local medical societies in the development and carrying out of their own programs.

The state program has three principal components—preparation of state and local publicity, assistance in the development of local action programs for indigent care, and assistance to local societies in their public relations programs. A concurrent project is the development of a directory of health resources for the use of the profession in securing needed care for indigent and medically indigent patients.

State and Local Publicity

Included among the positive programs of medicine which deserve increased public recognition are:

(a) Formal guarantee of service programs.

(b) Programs to assure the availability of physicians' services in emergencies.

Emergency call systems.

(c) Efforts to assure adequate numbers and distribution of physicians.

AMEF.

Physicians' individual support of medical schools (Comparison of per capita contributions to medical schools with contributions to other university divisions).

Student Loan and scholarship programs: MSMA, Local.

Sponsorship of science fairs and similar activities.

Distribution of careers information.

Recruitment and aid to paramedical personnel.

Physician placement activities.

Cooperation in the preceptorship program of Missouri University.

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In the control of diarrhea, Lomotil offers safety, efficacy and greater convenience.

DOSAGE: The recommended initial dosage for adults is two tablets (2.5 mg. each) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is under control. Maintenance dosage may be as low as two tablets daily. Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is supplied as unscored, uncoated white tablets of 2.5 mg., each containing 0.025 mg. ($\frac{1}{2400}$ grain) of atropine sulfate to discourage deliberate overdosage.

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(d) Work of state and local committees to promote better health care:

Rural Medical Service
Tuberculosis
Cardiac Disease
Civil Defense
Aging
Diabetes
Anesthesiology
Control of Venereal Disease
Laboratory Medicine
Physical Medicine and Rehabilitation
Scientific and Postgraduate Work
Medical Education & Hospitals
Cancer
Mental Health
Maternal Welfare
Infant and Child Care
Health and Public Instruction
Fractures
Eye Health
Industrial Medicine

Local Action Programs for Indigent Care

Local action programs in the field of indigent care are cooperative state-local efforts to identify present resources for the health care of indigent and medically indigent patients, uncover deficiencies, if any, provide for the exchange of information between local societies about effective programs that are working elsewhere, and finally, to take positive action to effect improvement in the care of indigent patients where necessary.

Among the elements touching on the care of the indigent and near-indigent are:

Professional guarantee of service programs
Emergency call systems
County hospitals
County physicians
County nurses
County Health Departments
Out-patient clinics
Nursing Homes
Home nursing services
Home-maker services
Charitable institutions and others.

Public Relations Assistance to Local Societies

The program contemplates staff public relations assistance to local medical societies when requested. Among the activities for which aid can be furnished are:

Consultation on program content and operation
Planning assistance
Publicity services
Information and materials exchange
Systems for reporting newsworthy public relations and action projects
Organization and operation of speakers bureaus
Use of motion pictures
Radio and TV activities
Press relations committees and society spokesmen
Press releases
Advertising
Distribution of literature and many others.

It is also planned to organize district public relations conferences from time to time, along with medical-press meetings.

Three letters have been written to County Medical Societies:

Letter 1, mailed April 26, advised the County Societies of the resolution adopted by the House of Delegates, requested that a local Committee on Public Service be appointed and that the name of the Chairman be sent to the State office.

To date, the names of Chairmen from 15 societies have been received.

Letter 2, mailed June 24, requested information from County Societies regarding local support of medical schools or medical students, other than AMEF, and also any local efforts to aid in recruitment of paramedical personnel or promotion of science fairs, etc.

Answers have been received from 20 societies.

Letter 3, mailed July 11, requested information on local societies indigent care programs, etc.

Answers have been received from 10 county societies.

Further Plans

In discussion of further plans of the committee, it was pointed out that some societies now have effective indigent care programs, as Pettis and Greene Counties, and that information about there programs will be made available to comparable societies.

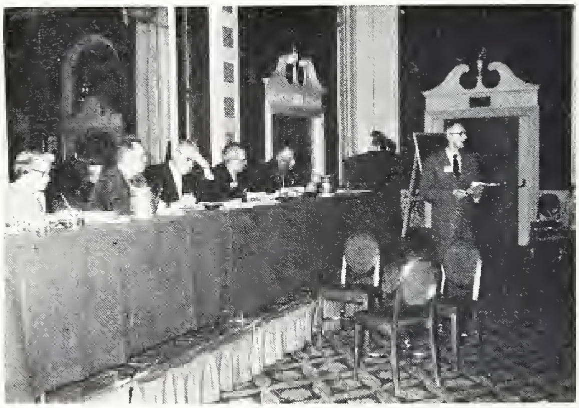
Release

The following news release was presented and approved by the Committee:

"Forty-four Missouri physicians were cited this week by the President of the Missouri State Medical Association for their efforts to help assure future medical care for smaller communities through cooperation with the University of Missouri Medical School Preceptorship program.

"Dr. R. O. Muether, St. Louis, President of the State Medical Organization, in marking the completion of the fourth successful year for the program, said that physicians who had participated have made a substantial contribution to the people of Missouri.

"The physicians cooperating with this program are helping assure that doctors' services will continue to be available in outside areas in the future," Dr. Muether said. "By demonstrating to medical students the values, satisfactions and opportunities for service that practicing medicine in a smaller community can bring, they provide real encouragement for our new doctors to serve in the smaller towns of the state.



Dr. Peterson addressed a meeting of the Reference Committee on Miscellaneous Affairs.

"Under the preceptorship program, senior medical students from the University of Missouri spend six weeks with a practicing physician in one of the state's smaller towns. The student works closely with the physician, seeing patients with him in the office, making home and hospital calls and observing office business procedures. In most cases the student lives in the physician's home and is called to accompany him on night calls and emergencies and generally lives the life of a practitioner in the town. He thus not only receives scientific training in medicine, but has the opportunity to see first-hand the advantages of out-state practice.

"The forty-four physicians to be cited this week by Dr. Muether for their cooperation with the program were:

"Jack Gunn, Versailles; William Richardson, Union; G. A. Richardson, Union; Robert Best, Higginsville; C. A. Schmidt, Gerald; R. W. Froelich, Lebanon; E. L. Niedermeyer, Tarkio; Robert Ward, Centralia; A. J. Graves, Mount Vernon; C. T. Shaw, Hermann; G. M. Workman, Hermann; Stephen Parks, Bloomfield; B. B. Hurst, Lebanon; T. R. McArtor, Browning; John F. Mabrey, Plattsburg; P. T. Luckenbill, Plattsburg; Robert Smith, Marceline; George Gary, Marceline; Doyle C. McCraw, Bolivar; Kenyon Latham, California; W. A. Broyles, Bethany; Charles Worley, Sweet Springs; Paul Roberts, Sweet Springs; Graham Parker, Platte City; Charles S. Price, Cassville; Kenneth Glover, Mt. Vernon; T. M. McDonnell, Marshfield; C. R. McDonnell, Marshfield; E. A. Stricker, St. James; H. F. Hoelscher, Warrenton; S. O. Schroeder, Liberty; A. G. Karraker, Farmington; Frank Zahrt, Princeton; D. W. Croom, Malden; Jordan A. Kelling, Waverly; Douglas G. Kelling, Waverly; Frank B. Atteson, Grant City; Wallace Carpenter, Rockport; P. V. Siegel, Smithton; J. H. Trolinger, Jackson; A. E. Spelman, Smithville; Wyeth Hamlin, Hannibal; A. J. C. McCallum, Aurora; R. R. Grayson, Columbia."

Service Kits

Outlines of possibilities of "Emergency Call" and "Guarantee of Service" programs were presented to the committee.

Student Loan Fund

After discussion, the following recommendations concerning the student loan fund were adopted:.

1. The Association wants the money to be available to students in the manner which will accomplish the most toward furthering the medical education of the individual and help assure adequate numbers of physicians to serve the public in the future.

2. Understandably, the Association also seeks to make the public aware of this program, as one of the positive programs of medicine for the benefit of the public. It is also desirable that medical students also be aware of and appreciate the program to the end that upon entry into practice they will be influenced to take an active part in the continuance of similar positive programs by the profession.

In connection with the second consideration, information can be given to the public about the plan at the time the funds are announced to the medical schools, and continuing emphasis can be given from time to time on the fact that the Association has made these funds available for the benefit of the medical students and the public. It would seem, however, that no publicity should be given the actual granting of a loan to an individual, although after a period of time, information could be provided on the number of individuals assisted.

At the same time, students at the schools, and potential medical students, should be made aware of the existence of the MSMA funds, and, of course, the individual recipients of loans would be aware of the source.

When details of the program have been agreed upon, a simple folder describing the loan fund, eligibility requirements, repayment provisions, etc., can be prepared. Letters can then go to the deans of all medical schools announcing the program and enclosing a small supply of folders, along with application forms, for distribution to students inquiring about loans.

(Since it is quite possible that, at any particular school, several years may pass without a Missouri resident applying for loan aid, there is some problem in keeping the schools conscious of the MSMA loan fund. To overcome this, a post card might be mailed to the schools shortly before the beginning of each semester, reminding them of the fund and offering to renew the supply of folders and application forms. At the beginning of each school year, a small bulletin board poster could also be supplied.)

Students would apply direct to the MSMA committee on the application forms provided. These would be designed to obtain information about the student, his financial resources, grades, references, etc., upon which the committee can base its decision.

The responsibility for and control of the program would rest with the MSMA committee, which would give final approval for specific loans within the total amount appropriated by the Association, disburse the money, maintain active contact with recipients after graduation and collect the repayments when they become due.

In suggesting possible general provisions for the loans, it was thought that the program should be a liberal one, similar to the following:

1. Loans to be made available to registered full-time students in A.M.A. accredited schools of medicine in the United States who are working toward an M.D. degree, and who have their home residence in Missouri.

2. Money to be loaned for any worthy purpose directly connected with furtherance of the student's medical education, including tuition, fees, books, equipment used in undergraduate education, necessary living expenses while in residence at the school, etc.

3. Provision that any student holding one or more loans from the MSMA fund would continue to be eligible to apply for further loans if the need exists. Maximum total loans would then be controlled on an individual consideration basis by the MSMA committee within the total fund appropriated.

4. Proceeds of the loan to be paid to the student himself for disbursement.

5. Interest would be charged on the loans at the rate of 2 per cent per annum from the date of the loan through one year after the date of beginning practice. While this interest would accrue during this period, it would not be payable, except at the student's option, until the principal of the loan becomes due and payable.

If during this period—up to one year after leaving or graduation from medical school, or after completion of internship, as provided—the student enters active military service, he may secure a continuation of the 2 per cent rate of interest for up to two additional years, upon approval of the student loan committee. It would be expected that such approval would be granted only where there are unusual extenuating circumstances in cases in which the student leaves medical school before graduating.

One year after date of beginning practice, the principal and accrued interest shall become due and payable, with the provision that repayment shall be completed in no more than four additional years from that date, and that no less than one-fifth of the total principal plus accrued interest, shall be due each year. (This gives a period of five years for repayment beginning with the date of completion of training.) The interest rate on the unpaid balance of the principal shall increase per annum by 1 per cent.

The recipient of the loan shall have the privilege of prepayment of principal and accrued interest in any amount at any time without regard to due date and without penalty.

6. Loans be secured by a legal note in a form to be approved by MSMA. Cosignature of the note would not be required.

7. In the event of death of the student before full repayment of the loan, the estate of the student should be held responsible for repayment. In event of permanent and total disability of the student before repayment, however, the amount of the principal and interest remaining due would be forgiven and the note cancelled.

It was felt that the approximate amount of a loan should be $1,000; that a bank or trust company should handle the account; that a committee of three should pass on the loans; that a foundation should be established which could solicit funds.

It was decided that a foundation should be established and a committee consisting of Drs. Muether, Furlow and Doyle was appointed to carry out the loan program until the foundation could be established and to start proceedings toward setting up the foundation.

Progress to Date

A. Dr. Muether reported that the names of 25 Chairmen of county society Public Service Committees have been received.

B. The questionnaires, referred to in the report, dealing with local programs to assist medical students and other paramedical personnel, have been received from 25 county societies.

C. The questionnaires dealing with local indigent care programs have been received from 18 county societies.

D. Kits have been prepared to aid county societies to set up an Emergency Call Service program and it is planned to send these to approximately 30 local societies at an early date.

E. The news release on MSMA participation in the University of Missouri preceptor program was sent on July 29 and got an excellent response over the state.

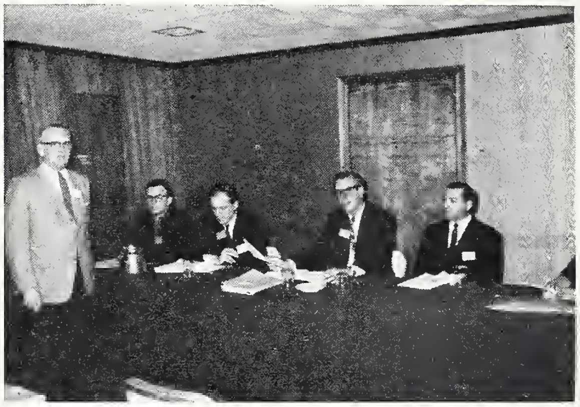
F. A start has been made to accumulate the information we need for the "Directory of Health Resources." The Woman's Auxiliary has consented to attempt to secure the necessary information for us.

G. Student Loan Fund: Dr. Muether reported that, of the 27 student loan applications received, eight have been processed, all favorably, for a total of $6,150; 19 applications are in process, and that the total loan requests exceed $20,000.

After discussion, in which it was shown that the original appropriation of $25,000 would not be adequate to meet the need, it was proposed that the Budget Committee make a recommendation for an additional appropriation, based on any excess left over from expenditures for the year. On motion of Dr. Muether, duly seconded, this was passed.

It was also suggested that the membership and the County Societies be informed as to what has been done and what is needed for the Student Loan Fund, in the hope of getting some private donations from these sources.

On motion of Dr. Furlow, duly seconded, the Report of the Public Service Committee was accepted.



The Reference Committee on Resolutions heard Dr. Dowell speak.

FIELD SECRETARY'S REPORT

Mr. McIntyre gave a report on the number of doctors locating in Missouri, stating that a good number can be expected from the University of Missouri graduating classes. Since January 1, 1960, four doctors from the class of 1957 and one from the class of 1959, University of Missouri, have located in rural areas of Missouri.

He also reported on new hospitals, new additions to hospitals, and plans for new hospitals in the following areas: new addition to Bothwell Hospital, Sedalia; Carroll County Hospital, about 70 per cent complete; Sullivan, contract has just been let; Stoddard County, Dexter; Cass County is thinking in terms of a new hospital. Bates County Hospital has just been opened, and a new hospital at Sweet Springs opened in August. Madison County, Fredericktown, will open about November 1, and Ripley County, Doniphan, and Cedar County Hospital will be open soon. Others include Smithville, Howard County Hospital and Johnson County Hospital at Warrensburg. Additions have been made in Monett, Hannibal, St. Joseph, Phelps County and Sikeston.

Mr. McIntyre reported on several county society meetings he attended including a fine program on "Athletic Injuries" given at the St. Louis Medical Society on August 28, and another on the same subject at the West Central Medical Society in Nevada on September 8. Representative Curtis spoke to the St. Louis County Medical Society on September 14, and Mr. Leo Brown of the A.M.A. spoke to the Greene County Medical Society on September 23.

Mr. McIntyre reported on the Preceptorship Program, stating that there are eleven preceptees, two to begin on December 30, and the rest later. He also stated that 11 physicians are needed to take preceptees.

LIAISON COMMITTEE WITH OSTEOPATHIC ASSOCIATION

The report of the Committee on Liaison with the Osteopathic Association was submitted by Mr. O'Brien, as follows:

Changes in Joint Licensure

It is recommended that Sec. 22, 1a, of the Final Revision of S.B. No. 50 be taken out of the bill by amendment, if possible, so that it may not be retained in the permanent statutes.

On motion of Dr. Dowell, duly seconded, this was approved. It was agreed that the two executive secretaries should determine the appropriate time to introduce a bill to secure this change. It was pointed out that there may be other changes necessary, one of them being the possibility of an increase in the charge for taking board examinations. The charge at present is $25 and the cost of obtaining the questions and tabulation of results is $25.

Medical-Legal Examiner

It was reported that the House of Delegates of the MSMA passed a resolution at its last meeting calling for efforts to change the coroner system to that of medical-legal examiner. This was discussed, it being pointed out that some states have had this law in effect for many years and that it has a great advantage over the coroner system; that legislation may be difficult because it is an elective office in the 114 counties; and that one bill, introduced in 1955, had not gotten out of committee. It was suggested that the office of medical examiner might be set up either in Jefferson City or at the University of Missouri. Final copies of the proposed bill should be ready in early fall for distribution.

Physical Therapy

It was reported that the physical therapists wished to be licensed in the state as a protection against those practicing who were not qualified. Illustrations were reported. It was stated that in 33 states this group coming under the healing arts act was discussed. Mr. O'Brien said that a copy of the proposed act would be in his hands early in September, at which time it could be studied by the group. No action was taken.

Staff Set-ups

Various problems of staff set-up of tax supported hospitals, as well as others, were discussed as to qualification of staff members and the possibility of some method of passing on such qualifications; the state hospital licensing law and its limitations; the power of the board of trustees of hospitals relative to professional qualifications; the possibility of an advisory committee from the group that might offer help to boards of trustees and to hospitals; the accreditation of hospitals; the greater problem in the small hospital as to qualification of staff members; the possibility of establishing minimal qualifications.

It was decided that in most instances, this was a local problem that could not be settled on the state level and it was agreed that the subject should be explored further at a future meeting.

After discussion, and on motion of Dr. Tillman, duly seconded, it was recommended that an act be prepared for submission to the legislature to increase the fees for examination for licensure from $25 to $40, and that a second act be prepared to eliminate subsection 1a from Section 22 of the Joint Licensure Act.

On motion of Dr. Furlow, duly seconded, the report of the Committee on Liaison with the Osteopathic Association was approved.

MEDICARE

Mr. O'Brien presented a letter received from Colonel Evans regarding the new Medicare Contract which will take effect on October 1, 1960. After discussion, a motion made by Dr. Tillman, duly seconded, to renew the Medicare contract for another year, was passed.

1961 ANNUAL SESSION PROGRAM

Dr. Matthews gave a brief report on the 1961 Annual Session program, stating that it was shaping up nicely. He brought up the subject of the possibility of forming a 50 Year Club for members who have received their 50 Year pins. After discussion, and on motion of Dr. Stuart, duly seconded, it was decided to send a letter to all the 50 Year members asking whether or not they wished to form a 50 Year Club and, of so, if they would attend a luncheon for them at the Annual Session.

STATE DIVISION OF HEALTH—MISSOURI PUBLIC HEALTH PLAN

Dr. Hardwicke discussed the Missouri State Public Health Plan and requested that the Association consider the philosophy of it and, if possible, endorse the budget which must be submitted to the Legislature. Copies of the plan were given to the Councilors and they were asked to mail their comments to the Committee, composed of Drs. Matthews, Stuart and Barger.

SEROLOGY PROGRAM

Dr. Hardwicke furnished information about the use of the State Laboratories by private physicians for serological tests. He stated that some of the County Medical Societies, and many individual physicians, have urged that the Division of Health should return to its former practice of handling all serological tests. He stated that the volume of work had declined approximately 30 per cent. He stated that he hoped that the State Laboratories will be able to provide the following services on request: Phage typing of Coagulase; Positive Hemolytic; Streptococcus Aurian; Rapid identification of Rabies; Rapid identification of Type A Beta Hemolytic Streptococci and Epidemiological surveys.

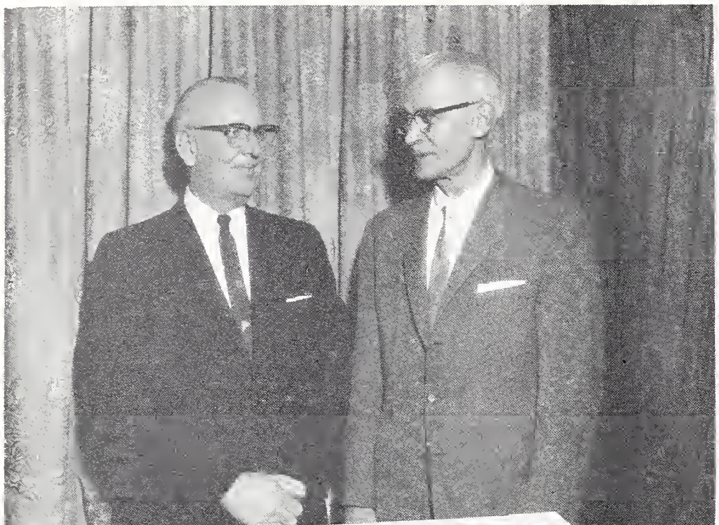
The information about serological testing and special major laboratory services was referred to the MSMA Committee on Laboratory Medicine.

NURSING HOME NEEDS

Dr. Hardwicke explained a proposed program regarding the development of a larger number of nursing home beds. He explained that there are about 11,000 licensed beds at present and that about 6,000 additional beds are required in our state. The plan contemplates the use of local, state and federal funds through the Hill-Burton program. He was asked to send a memorandum of explanation for the future consideration of the Council.

HEART DISEASE CONTROL

Dr. Hardwicke also discussed the grant for heart disease control from the federal government, stating that part of this money has been used for educational purposes. It has been made available to medical schools in Missouri for postgraduate heart disease educational programs. A request was received from St. Louis University in regard to a Heart Oscultation Course. He asked whether or not the Association wished the Divi-



1. President-elect Dowell and President Summers conversed. 2. Congressman Thomas B. Curtis spoke at the banquet. 3. Dr. Muether presented the gavel to Dr. Summers. 4. Four new members of the Council, Drs. English, McCraw, Fisher and Rowlette posed together. 5. The University of Kansas City Choir sang at the banquet. 6. Officers and guests were seated at the head table at the banquet. 7. Members of the Council took

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time out for a picture, Drs. Furlow, Whitener, Barger, Stuart, Dowell and Hollweg. 8. Dr. Muether (right) made AMEF presentations to Dr. Wilson, Dr. Smith, and Dr. Hampton. 9. Past Presidents were introduced at the banquet. 10. Physicians received 50 year pins at the banquet. 11. The annual banquet was a highlight of the session.

sion to continue to provide funds for that purpose. After discussion, it was decided to refer this to the Committee on Study of Cardiac Disease.

A.M.A. DELEGATE

Dr. Kiene presented interesting sidelights on the recent A.M.A. meeting.

DOCTOR'S LIEN LAW

Mr. O'Brien discussed a legislative act to provide a Doctor's Lien Law which was referred to the Council by the Missouri Academy of General Practice. He furnished a memorandum which outlined a number of questions which need answering before such an act can be drafted. On motion of Dr. Tillman, duly seconded, it was decided to send these suggestions to the Missouri Academy of General Practice.

Discussion followed on Missouri Academy of General Practice proposed legislation on married persons being declared to be adults, regardless of age, or an act relating to the competence of minors. After discussion, a motion was made by Dr. Bull, duly seconded, that this bill be introduced in the next session of the legislature and that the Missouri Academy of General Practice be so advised. The motion passed.

FEDERAL LEGISLATION

Mr. James W. Foristel of the A.M.A. Washington Office spoke on the final outcome of federal legislation for the health care of the aged. He urged Missouri to take advantage of the new legislation which has two facets: (1) provides federal matching funds for persons already on public assistance rolls over 65 years of age; (2) matching funds will be provided to states for the near needy persons, 65 years or older. The legislation is explained in the following Washington Report:

"The federal government is offering states liberal matching funds to provide health care for needy and near-needy persons 65 years of age and older.

"The program, which Congress approved in the bobtailed postconvention session, is supported by the American Medical Association and allied health groups.

"Congressional approval of the federal-state program marked a victory for the medical profession and a defeat for Democratic Presidential Nominee John F. Kennedy, the AFL-CIO and other advocates of the Social Security approach to the problem.

"In the key vote on the issue, the Senate rejected by a 51-44 vote a Kennedy proposal that would have provided hospitalization and medical care for the aged under the Social Security system. The Kennedy plan would have required an increase in payroll taxes.

"Republicans and Southern Democrats joined in the Senate to defeat the Social Security approach which was opposed vigorously by the medical profession.

"After voting down the Kennedy plan and a separate proposal of the Eisenhower Administration, the Senate passed a modified version of a House approved program. The modifications, sponsored by Sen. Robert S. Kerr (D., Okla.) and others, provided for increases in the percentage of federal matching funds and for administrative changes designed to facilitate state participation.

"Under the legislation as signed into law by President Eisenhower, (1) substantial increases are authorized in federal grants to states to help with health care expenses of the 2.4 million persons on old age assistance rolls, and (2) Federal matching funds are offered the states to finance a new program of health care for an estimated 10 million aged persons who are not on relief but whose incomes may be inadequate to take care of all their health costs.

"Start of the program was authorized for October 1 for those states where new state legislation is not required.

"Administration of the program rests entirely with the states, subject to Federal approval in broad terms. It is up to each individual state whether it participates. Eligibility standards for beneficiaries and what health care services are provided are matters for the states to decide.

"If a state so chooses, it can take care of all the health needs of an eligible beneficiary. The law authorized inpatient hospital services; skilled nursing home services; physicians' services; outpatient or clinic services; home care services; private duty nursing services; physical therapy and related services; dental services; laboratory and x-ray services; prescribed drugs, eye-glasses, dentures and prosthetic devices; diagnostic screening and preventive services, and any other medical care or remedial care recognized under state law.

"For medical expenses of persons on old age assistance rolls, the Federal government will contribute 50 to 80 per cent—with states with low per capita income getting the larger percentages of federal aid—of an amount equal to $12 multiplied by the number of old age assistance recipients in a particular state.

"The matching formula will be the same for financing the health care of the near-needy but there is no $12 limitation figure.

"Health, Education and Welfare officials estimated first-year costs of the program at $262 million—$202 million federal and $60 million state. Annual costs are estimated to rise by the end of the fifth year to $340 million federal and $180 million state. However, these estimates admittedly are no more than educated guesstimates because so much depends upon state action.

"It was estimated that maximum participation and a state contribution of $152,000 would bring Missouri $4.8 million in federal matching funds in the first year of the program.

"The medical-care-for-the-aged legislation was included in an omnibus measure titled Social Security Amendments of 1960. It also eliminated the age 50 requirement for eligibility for disability insurance benefits.

"The Senate knocked out of the House bill a provision that would have brought physicians under Social Security coverage.

"On other legislation of interest to the medical profession: Congress passed bills authorizing expenditure of $10 million of counterpart funds abroad to stimulate international research; authorizing up to 15 per cent of National Institutes of Health research grants for nongovernmental medical research; directing a broad study of air pollution problems; requiring informative labeling on packages of hazardous substances for household use, and giving the government power to establish a tolerance on the amount of color additives that may be used in various products.

"The Senate failed to act upon House-approved legislation that would have given physicians and other self-employed persons a tax break on income put into private pension plans (Keogh Bill)."

Mr. Foristel stated that the A.M.A. is encouraging states to give careful consideration to this program and to urge state legislatures to appropriate sufficient funds in order to secure the matching grants.

Mr. O'Brien suggested that it might be well, at the next Council meeting, to consider the implications of the various state programs and what the position of the State Association should be relative to them.

Mr. O'Brien called attention to a letter of thanks received from Dr. Blasingame for the splendid cooperation of the medical profession and others in defeating Forand-type legislation.

MATERNAL WELFARE REPORT

Dr. Krebs presented the report of the Maternal Welfare Committee, in the absence of Dr. Keeler, who could not attend. He reported on the two meetings held, one on May 15 and the other on September 18, as follows:

Birth Certificate

"The following changes in the birth certificate were suggested: The short form, leave off both mother and father for routine use of a birth certificate. Weight be listed in both grams and pounds. The section on diet be deleted.

Under Complications of Pregnancy—Nonpuerperal, subheads be used in Rheumatic Heart Disease, active, inactive, and that a new box be added to show, Other heart diseases. In the section on, Was Mother's Blood Tested for Rh Factor: the words, "if Rh negative" following "mother" be added.

In the section on Conditions of Labor, 6 (Other malpresentation) be starred, and a 10th question be added as, "Previous Sections." Also add "Membrane ruptured 24 hours or longer. Under Delivery, Sedation, add Analgesia and have only "yes" and "no."

Delete the section on At moment of Delivery Mother was: Under Method of Delivery, 06 Breech-partial extraction should read, "Breech, assisted." Primary should be added in regard to section. Under Condition at Birth, the three headings should read: Spontaneous respiration (under 3 minutes). Spontaneous respiration (over 3 minutes). Resuscitation required.

Under malformation, add Birth Injury, Cleft palate and/or harelip should read, Cleft palate and/or lip. No. 7, cerebral palsy should be deleted. Birth injury should have an asterisk with "Please specify."

Under "Placenta, Abnormal" should have an asterisk with, "Please specify."

Study by Osteopaths

The possibility of including osteopaths in the maternal mortality study was discussed. It was felt that Dr. Hardwicke might call a joint meeting to explore what each group is doing and how coordination might be achieved. Dr. Hardwicke was asked to consult the Council about calling such a meeting.

Legislation

Legislation was discussed and Mr. McIntyre read the following recently enacted legislation in California:

Section 1. Section 211.5 is added to the Health and Safety Code to read:

"211.5. All records of interviews, written reports and statements procured by the state department or by any other person, agency or organization acting jointly with the state department in connection with special morbidity and mortality studies shall be confidential insofar as the identity of the individual patient is concerned and shall be used solely for the purposes of the study. The furnishing of such information to the state department or its authorized representative, or to any other cooperating individual, agency or organization in any such special study, shall not subject any person, hospital, sanatorium, rest home, nursing home or other organization furnishing such information to any action for damages. The provision of this section shall not apply to general morbidity and mortality studies customarily and continuously conducted by the state department and which do not involve patient identification.

"Nothing in this section shall prohibit the publishing by the state department of statistical compilations relating to morbidity and mortality studies which do not identify individual cases and sources of information or religious affiliations." Effective: Sept. 18, 1959.

It was decided to ask Mr. Noble to study the California law.

Expenses

It was pointed out that Western Division had been spending about $250 a year for secretarial help, stationery and postage. It was decided to ask that the Association budget up to $500 for the work in the two divisions.

Publishing of Speech

Dr. H. C. Willumsen, St. Joseph, asked permission for a talk, using committee statistics, given before record librarians to be published by the librarians. This was given.

Next Meeting

It was tentatively decided that the next meeting of the Committee would be held in September, possibly the 18th.

Report of September 18 Meeting
Joint Meeting With Division of Health and Osteopaths

Dr. Keeler reported on two meetings called by Dr. Hardwicke where representatives of the Missouri Osteopathic Association, the Missouri Division of Health and Dr. Keeler met to explore what each group is doing in trying to improve maternal welfare and how coordination of programs might be achieved. The Council of the State Association approved such a session at its meeting in June, 1960. The first meeting herein men-

Dr. Summers received the gavel from Dr. Muether at the banquet.

tioned was held July 28 with Mr. Paul Adams, Executive Secretary, Missouri Association of Osteopathic Physicians and Surgeons, Dr. H. M. Hardwicke and Mr. Tom Dundon of the Missouri Division of Health and Dr. Keeler present. Little was accomplished at this session other than exchange of information which consisted chiefly of furnishing Mr. Adams with copies of the worksheets and definitions used by our Maternal Welfare Committee in maternal death studies.

The second meeting was held on September 1, with Mr. Adams, G. W. Ringland, D.O., Cape Girardeau; L. E. Davidson, D.O., Kansas College of Osteopathy; Dr. Hardwicke and Mr. Dundon, and Dr. Kenneth Nicolay and Dr. Keeler of Kansas City, present. The worksheets and definitions passed out at the first meeting were discussed. The Osteopathic Association representatives were frank in pointing out that they had not to date progressed far in Maternal Welfare Committee activities. They agreed, however, to set up a committee to function in similar fashion to ours. They were given copies of letters our committee sends to attending physicians in maternal death cases.

Change of Fiscal Year

It was voted to change our committee's fiscal year for reporting maternal death studies to run from July 1 through June 30. This will make it easier to coordinate the studies of our committee with those of the Osteopathic Association.

Reprints of Annual Report

Increasing requests for copies of our Committee's Annual Reports are being received from other state Maternal Welfare Committees. These states are making their reports available to us. It is requested that our committee be allowed 50 reprints of our annual report for the year 1960 which is printed in Missouri Medicine to distribute to other states on request.

Birth Certificate

The Committee requests approval of the Council to send a copy of the new proposed birth certificate form and worksheet agreed upon by our committee and the Division of Health, with an explanatory letter over the signature of this committee to all members of the Missouri State Medical Association for their information, reaction and recommendations.

The Committee considered a new proposed birth certificate and would like the Council's permission to publish this new form and send it to all members of the Association with a questionnaire.

Dr. Krebs discussed the possibility of obtaining $500 from the State Association for the Eastern and Western Divisions for stationery, postage and secretarial help in their maternal mortality studies.

On motion of Dr. Barger, duly seconded, this report was approved.

CONSTITUTION AND BY-LAWS

Dr. Bull presented the revised Constitution and By-Laws of the Cape Girardeau County Medical Society and asked that they be approved. On motion of Dr. Stuart, duly seconded, these were approved.

GEORGIA BROWN BLOSSER HOME

Mr. O'Brien reported that a letter was received from Dr. Wilson requesting the appointment of a person to represent the Association on the Board of the Georgia Brown Blosser Home, Marshall, Mo. The following names were presented: Mrs. McBurney, of Slater, and Mrs. Jordan Kelling, President of the Woman's Auxiliary. These two suggestions are to be sent to Dr. Wilson.

FIRST ANNUAL DOCTOR'S DAY

Dr. Wilson reported on the first annual M.D. day at the Medical Center which will be held on October 21 and 22, stating that a fine program had been arranged and invited all of the Councilors and the doctors from their districts to be present.

FAMOUS DECEASED PHYSICIANS

Dr. Muether presented a letter from the Contributing Editor of *Postgraduate Medicine,* requesting names of famous deceased doctors to be written up for publication as a medical historical feature. It was suggested that a committee be appointed to discuss this. Dr. Muether, Dr. Furlow and Dr. Doyle were asked to study this.

REPORT OF COMMITTEE ON PHYSICAL MEDICINE AND REHABILITATION

Dr. O'Reilly presented the report of the Committee on Physical Medicine and Rehabilitation, calling particular attention to the proposed legislation to license Physical Therapists in Missouri.

The report follows:

Proposed Legislation to License Physical Therapists

The purpose of the meeting was to consider proposed legislation submitted by the Missouri Chapter of the American Physical Therapy Association which contemplates licensure of physical therapists in Missouri.

Dr. O'Reilly reviewed the past history of the proposal, pointing out that the Missouri chapter had submitted a proposal in 1956 which was tentatively approved in principle by the Committee. The Council of MSMA, in considering the Committee report recommended that efforts to secure legislation be delayed until after the joint licensure bills be adopted by the legislature.

Special A.M.A. Committee Report

In the meantime, the American Medical Association created a special committee known as "The Committee on the Relationship of Medicine With Allied Health Professions and Services."

The report of the A.M.A. Committee, adopted by the A.M.A. House of Delegates, June 1960, considered physical therapy legislation in the various states. The report listed 33 states which have statutory regulations, 17 of which have licensing laws and 17 have certification laws. (Note, 2 laws are in effect in California, one a licensure law, the other a certification law.) These laws vary in scope, however, many of them include a provision to the effect that the person licensed or certified must practice physical therapy only on prescription or under the direction or supervision of a licensed physician. This provision is weak though in the case of certification laws because of the nature of such laws.

All of the laws contain some limitation on scope of practice, but the definition differs somewhat from state to state. The most complete definition is in Connecticut. The most specific limitation of scope is found in the Oklahoma law.

In general, the A.M.A. report included the following pertinent statement:

"The medical profession believes that the adoption of a position on governmental (state) regulation which would apply permanently to all health related sciences, professions and services is not in the present nor future interest of the public. In relation to this general principle, the medical profession believes that: (a) The extension of governmental licensure and/or certification for scientific, professional and technical health personnel is not indicated except when it is mutually agreed that such regulation is necessary in the public interest and such regulation is jointly developed and supported by the medical profession and the segments of medicine concerned and the group seeking statutory regulation. (b) If instances do arise in which it is jointly agreed that it is necessary in the public interest that governmental (state) licensure and/or certification be developed for persons in activities directly involving the care of patients: 1) Such statutes must require acceptable educational standards as determined by individuals acknowledged as leaders in education and practice in the field; 2) Such statutes relating to services which involve the diagnosis or treatment of nervous, mental or physical illnesses or disorders of individual patients should require such services to be performed under the direct supervision of or in genuine collaboration with a qualified physician."

Action

After discussion with Miss Lake, of the Physical Therapy group, in which several changes in the proposal were recommended the Committee approved the legislation in principle, as amended, for submission to the Council of MSMA. Miss Lake agreed to discuss the changes with her group and to report back about September 1.

The Committee felt that some provision should be made to control and license the physical therapists, and recommends that the State Association support the Physical Therapists in getting this legislation through.

It was reported that the bill had been studied and that it had some weak spots which needed some changes. On motion of Dr. Tillman, duly seconded, the report of the Committee was accepted with the understanding that the Association would endorse the legislation when it is amended as outlined by our attorney. One Councilor voted against the motion and another asked that he be recorded as not voting.

WHITE HOUSE CONFERENCE ON AGING

Mr. O'Brien reported on the White House Conference on Aging to be held in Washington, D. C., January 9-12, 1961, and stated that Dr. Stanley Peterson, Chairman MSMA Committee on Aging, was appointed as a delegate. On motion of Dr. Summers, duly seconded, it was agreed to pay Dr. Peterson's expenses to attend this meeting.

BUDGET COMMITTEE

The following members were appointed to serve on the Budget Committee: Drs. Doyle, Chairman; Muether, Summers, Barger, Bull, Tillman, and Dr. Dowell, ex-officio. The Budget Committee will meet prior to the next Council meeting, at which time the budget will be presented.

CLAY COUNTY PROBLEMS

Three representatives of the Clay County Medical Society appeared before the Council to present the background regarding membership applications received from physicians employed by the McCleary-Thornton-Minor Hospital and Clinic in Excelsior Springs. Correspondence was presented between the Clay County Medical Society and the A.M.A. regarding the institution. After discussion, and on motion of Dr. Barger, duly seconded, it was agreed that the corporate practice of medicine is involved in the operation of the institution and the advertising practices of the institution are contrary to the rules and regulations of the Clay County Medical Society. It was agreed that a letter be sent to the Clay County Medical Society to that effect. Motion passed.

AMEF

Mr. O'Brien reminded the Councilors that letters were going to the entire membership regarding AMEF, that October is Missouri AMEF Month, and that the Chairman of the MSMA Committee, Dr. Murphy, has asked him to request that the Councilors urge the doctors in their districts to contribute to AMEF.

NEXT COUNCIL MEETING

The next meeting of the Council was set for December 10-11, 1960.

Meeting of December 10-11, 1960

The Council met at Hotel Chase, St. Louis, on December 10, 11, 1960, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell, R. O. Muether, St. Louis; J. H. Summers, Lebanon; John I. Matthews, Jefferson City; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Byron M. Stuart, Boonville; Paul R. Whitener, St. Louis; O. B. Barger, Harrisonville; K. C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; Messrs. John R. Buckner, Springfield; W. H. Bartleson, Kansas City; Hollister Smith, Robert Duffey, Lemoine Skinner, Jordan Singleton, Tom R. O'Brien, Ray McIntyre, and Helen Penn, St. Louis. Present during parts of the meeting were Drs. Joseph B. Kendis, T. J. Cooper, James N. Haddock and Charles Miller, St. Louis County; Carl D. Siegel, Sedalia; Stanley S. Peterson, E. J. Schwartz and Durward G. Hall, Springfield; Earl L. Loyd and H. M. Hardwicke, Jefferson City; Vernon E. Wilson, Columbia; Mr. Edgar Mothershead, St. Louis.

REPORT OF EXECUTIVE SECRETARY

Mr. O'Brien reported attendance by himself and Dr. Muether at the Missouri Hospital Association meeting in Kansas City in November, and told of a panel on "Hospital-Physician Relations." He said that Congressman Richard Bolling spoke at the meeting favoring the enactment of the Forand bill or similar legislation by the 1961 Congress.

Correspondence: Letters in answer to congratulatory letters written to the recently elected Missouri Governor and members of Congress were read.

Radiologic Society: It was announced that the Missouri Radiologic Society had been organized recently and that the organization wished to meet at the time of the Annual Session.

PUBLIC SERVICE PROGRAM

Excerpts from the report of the Public Service Committee, as given by Dr. Muether, are as follows:

The original resolution of the House of Delegates, suggesting generally a program of advertising to publicize the postive programs of medicine—particularly those pertaining to guarantees of medical care for the indigent and aged, was reviewed. After investigation, it was apparent that an effective paid advertising program as originally contemplated would be expensive in the extreme.

The Association has been successful in publicizing several of the favorable projects of medicine—the AMEF Campaign, the Preceptorship Program, the new MSMA Student Loan Fund, and our Student Honors Awards.

The Woman's Auxiliary has accepted the job of compiling information for the directory of state health resources and the first pilot study is being done in Lafayette County under the auspices of Mrs. Jordan Kelling, President of the Woman's Auxiliary.

Statistics relative to the present status of the Student Loan Fund show that a total of 34 loan applications were received, of which 21 were granted, for a total of $14,665. Several are pending in the amount of $2,600 or a total of $17,265. Papers to provide Incorporation of the Foundation have been prepared and will be presented later.

It was recommended that the Council make recommendations to the House of Delegates regarding implementation of the Mills-Kerr Bill. The first important question being whether or not the Association should press for the adoption of the Mills-Kerr provisions in Missouri, and, if so, up to what level of state appropriations. The second question is what the Association should advocate as far as the provisions of an expanded Vendor program are concerned.

No action was taken on the report.

Materials covering "Missouri Directory of Health Resources" and questionnaires, a proposed letter concerning the Student Loan Activities, and reports from various counties on health care within those counties were given each Councilor for study.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on the preceptorship program and stressed the importance of the program. He said that only 11 students had elected to be preceptees this year compared to 18 last year.

Mr. McIntyre reported on some outstanding county society meetings held recently, several of which had been combined meetings with members of the bar.

A.M.A.

Dr. Hall reported briefly on the A.M.A. Clinical Session and said that a full report prepared by Dr. Kiene would appear in Missouri Medicine. He urged that the Association support implementation of the Mills-Kerr bill in Missouri.

Mr. O'Brien reported to the Council that Dr. Hall had been recognized on the floor of the House as a newly elected Congressman and that Dr. Hall gave a short interesting report on "Campaigning in the Ozarks."

HOPE

Dr. Hollweg reported on attendance at a meeting of the People to People Foundation, the organization sponsoring the hospital ship HOPE. Work of the organization was discussed and the following resolution was adopted on motion, duly seconded:

Whereas, The People-to-People Health Foundation (and its Project HOPE) has been established to bring the skills and technics developed by the American medical and allied professions to other nations of the free world in their own environment, adapted specifically to their needs and their ways of life, and

Whereas, The Foundation depends on the support of the American people led by doctors of medicine, the allied professions, business and industry, and

Whereas, Many doctors of medicine, local, state and national medical organizations have endorsed the Foundation's program, and

Whereas, A number of members of the Missouri State Medical Association have expressed interest in serving on a representative committee of doctors of medicine in our state, therefore, be it

Resolved, That the Missouri State Medical Association endorses and commends the interests and objectives of the People-to-People Health Foundation and the work of a Missouri Physicians Committee for the People-to-People Health Foundation.

It was pointed out that an active committee in the state would assist in giving people opportunity to contribute, give leadership in the project, obtain publicity and review applicants for service in the project.

The Chairman appointed a committee of Dr. Hollweg, chairman, Dr. Furlow and Dr. Tillman.

GRAND RIVER PLAQUE

A plaque which the Grand River Medical Society presents to its retiring presidents was shown and it was suggested that other societies might wish to do something similar.

LEGISLATION

Mr. O'Brien reported that an amendment had been prepared on the joint licensure law which would strike out that portion licensing an individual physician; also an amendment to raise the cost of the examination from $12.50 to $20.00. He said that these might require correction when the new Statute books come out, giving correct section numbers.

He said that other legislation may include a bill on immunization of children which is being sponsored by the Junior Chamber of Commerce, and which will be reported on by the Committee on Infant and Child Care; physical therapy licensure, which has been studied and changes suggested; medical-legal examiner system, to be reported on by the Committee on Laboratory Medicine. He said that other legislation might include action concerning the vendor program, mental health legislation, Division of Health proposals, and University of Missouri appropriations.

ANNUAL SESSION

Dr. Matthews reported on the Annual Session, giving a schedule of events and the scientific program. He said that the principal changes from previous years would be a dinner on Sunday evening, complimentary to county society presidents and secretaries and their wives and to new members and their wives, and open to other members by subscription; a subscription luncheon meeting on Monday noon for the formation of a 50 Year Club; a breakfast meeting as the final session of the House of Delegates on Wednesday morning, complimentary to members of the House of Delegates and open to any other members by subscription.

LABORATORY MEDICINE

Dr. Cooper gave the following report for the Committee on Laboratory Medicine:

Division of Health—Laboratory Services

The Committee reviewed the memorandum of H. M. Hardwicke, M.D., dated September 15, 1960, relating to laboratory services to be offered to physicians by the Division of Health. The Committee concurs with Dr. Hardwicke's previously announced policy for cutting down on the handling of routine serologies by the Division of Health laboratory. Though the Committee recognizes that for some time it will be necessary for the Division of Health to provide these services to some physicians, it was pleased to note that in the past year the number of such serologies was considerably reduced in line with Dr. Hardwicke's expressed wish that more and more of such work be sent by doctors to private laboratories.

Dr. Luck spoke briefly at the University of Missouri Medical Alumni luncheon.

The Committee once more wishes to call attention to the previously announced agreement of the Missouri Society of Pathologists that laboratory procedures will be performed without charge by pathologists when the submitting physician indicates that the patient is indigent.

In his memorandum of September 15, Dr. Hardwicke set out in detail five major specialized services he believes his laboratory may valuably offer to the practicing physicians of the state. These relate to (1) phage typing of coagulase positive hemolytic streptococcus aureus; (2) rapid identification of rabies; (3) the rapid identification of type A beta hemolytic streptococci; (4) epidemiological surveys; (5) consultant services for medical records librarians.

It is the recommendation of the Committee on Laboratory Medicine that the Division of Health be encouraged to make these services available to physicians throughout the state on request.

Medico-Legal Examiners

The Committee considered a draft of a proposed act, known as House Bill 339, which was introduced in the 1955 session of the Missouri Legislature, pertaining to the establishment of a state Medico-Legal Examiners System in lieu of the Office of the Coroner. The Committee reviewed the first seven sections of the act (21 sections) and agreed to meet at a later date to review the remainder as well as the changes which were recommended by the various members.

The Committee recognized that it would not be feasible to have the bill in finished form for introduction into the session of the legislature which will begin in January, 1961. The Committee will continue its study and when its draft is complete will review it with an appropriate committee of the Missouri Bar. The final draft will then be available for action by the House of Delegates at the 1962 Annual Session and for submission to the legislature in January, 1963. It is the judgment of the committee that no speedier action on this matter would be prudent or possible.

On motion of Dr. Furlow, duly seconded, the report was accepted.

ST. LOUIS COUNTY PLAN

Drs. Kendis and Miller explained to the Council the plan that has been established in St. Louis County to care for the elder citizen who is in need of reduced medical costs. The plan entails a card to be presented by the patient to the physician, showing what reduction, if any, he should have in cost of his care. These cards are issued after application to and study by the society. It was reported that 265 doctors are participating in the plan at present. Good publicity was reported in the *Globe-Democrat* and the plan was reported to the A.M.A. Public Relations Conference. It is hoped that druggists will participate in the program. It was estimated that 20 per cent of persons over 65 may be eligible for reduced rates.

On motion of Dr. Matthews, duly seconded, Drs. Kendis and Miller were thanked for their report and the Society commended for this work.

CIVIL DEFENSE

Dr. Siegel presented the following recommendations from the Committee on Civil Defense:

1. The MSMA Committee on Civil Defense Disaster Medical Care should make every effort to support all types of Civil Defense activities in the state, offering medical leadership in the development of all such programs.

2. It was recommended that MSMA take steps to initiate a Governor's Civil Defense Advisory Committee. This committee would serve as advisor to the Governor on aspects of Civil Defense. Lists of names submitted by MSMA to the Governor for appointment to serve on the Advisory Committee should consist of physicians who are familiar with disaster medical care, and be men of such stature as to influence organizational medicine and the state legislature. It was suggested that the Advisory Committee meet quarterly and that meetings be open to non-medical groups and individuals interested in Civil Defense.

3. A recommendation was made that the Chairmen of the C.D. Committees of various organizations meet quarterly to discuss and coordinate activities. Such inter-association conferences could be called by the State Division of Health. Objectives of the interassociation group would include: (a) Manpower—inventory available medical and para-medical personnel throughout the state; (b) Training—working in conjunction with the

U. S. Public Health Service, packets of educational material could be developed, along with films, slides, etc.; (e) Utilization of Facilities—plans could be developed for proper utilization of 200-bed pre-positioned Civil Defense hospitals in the state.

4. It was suggested that the Chairman and Vice-Chairman of the MSMA Civil Defense Committee be appointed to serve for three-year terms. The Vice-Chairman would succeed as Chairman. Members of this committee should include medical representatives from Kansas City, St. Louis and the three medical schools in the state—at Missouri, St. Louis and Washington Universities.

5. The Chairman of the MSMA on Civil Defense was requested to secure approval of the MSMA Council at next meeting in December of recommendations for: (a) a Governor's Civil Defense Advisory Committee and (b) establishment of similar advisory committees in each county.

6. It was suggested that the MSMA Council be advised that 1.5 million copies of a new pamphlet. "Two-Week Survival in a Shelter," will be available for distribution in the state on or about January 1, 1961.

7. It was recommended that the Committee have a half-day Civil Defense meeting on Sunday, March 19, just prior to the start of the Annual Session. Wives could be invited to attend, and a recognized authority on Civil Defense be presented as guest speaker.

8. The Committee members feel that all Civil Defense activities should eventually be paid for with tax funds. It was suggested, however, that the Chairman request an annual MSMA appropriation of $1,000 to help defray Committee members' necessary expenses until such time as the state legislature appropriates money for this purpose.

9. The Chairman will also seek Council approval of a request for booth space at the 1961 Annual Session for display of a scale-model C.D. hospital.

10. It was recommended that the Committee work with deans of the three medical schools in Missouri and the M.E.N.D.S. coordinators to implement annual area test alerts.

11. It was recommended that the MSMA Executive Secretary, the Chairman and members of the MSMA Civil Defense Committee, the Director of the Missouri Civil Defense Authority, County Medical Society Civil Defense Chairmen and local Public Health officers meet to formulate a uniform C.D. plan for the entire state.

12. It was suggested that each member of the MSMA Committee on Civil Defense be assigned the responsibility for maintaining contact with one of the other professional groups in the state which are interested in Civil Defense, i.e., osteopaths, dentists, nurses, veterinarians, et al.

Dr. Siegel announced a one-day course in Civil Defense, entitled, "Early Care of Multiple Injuries" to be presented at the University of Missouri Medical Center on April 1.

On motion of Dr. Stuart, duly seconded, a scientific exhibit at the Annual Session was approved.

On motion of Dr. Hollweg, duly seconded, the report was accepted with the provision that requests for appropriations be brought to the attention of the Council as they become necessary in the working of the Committee.

CORPORATE PRACTICE

Corporate practice and the work of the committee appointed to make such a study was discussed briefly. It was pointed out that actions by the A.M.A. had made this work much more indefinite but that the committee was continuing its study.

TREASURER'S REPORT

Dr. Doyle reported on the financial status of the Association and the investments.

On motion of Dr. Barger, duly seconded, the report was accepted.

BUDGET

Dr. Doyle presented the following proposed budget for the calendar year 1961:

Salaries	$ 65,700.00
Office Rent & Light	4,700.00
Postage	4,000.00
Printing, Stationery, Office Supplies	4,000.00
Jrl. Expense, Paper & Printing	52,000.00
Telephone & Telegraph	3,000.00
Insurance, Employees Pension Plan	7,187.00
Professional Fees	4,000.00
Taxes Payroll	1,900.00
Travel Expense	6,000.00
Committees	37,850.00
Furniture & Fixtures	1,000.00
General Expense	3,000.00
Total	$194,337.00

STUDENT LOAN FUND

On motion of Dr. Whitener, duly seconded, it was voted to appropriate $25,000 from current funds for the Student Loan Fund. It was suggested that as soon as the legal status of the fund could be cleared for tax exemption, means should be set up to make contributions possible.

MENTAL HEALTH

Dr. Haddock presented the following report for the Committee on Mental Health:

Purpose

Dr. Haddock stated that the purpose of the meeting was to discuss legislation and changes in laws as proposed by the First Missouri Mental Health Conference, held in Jefferson City, September 8, 9, 1960. A digest of the proposed legislation included the following:

Juvenile Code

Amendment to the Juvenile Code to permit return of the child to the court when he is found not to be in need of state mental hospital care. This is aimed at relieving the congestion of the children's ward brought on by dumping problem children of all types. Dr. Duval explained that this change was primarily aimed at allowing the state hospitals to return children no longer in need of hospitalization to the training schools at Boonville and Chillicothe.

After discussion, this proposal was approved by the Committee.

Non-resident Mental Patients

The following résumé of the situation on non-residents needing mental care was presented: "Measure to enable state to arrange for transfer of non-residents to the proper state. Only the Inter-State Mental Health Compact provides this now."

Dr. Duval pointed out that the Inter-State Mental Health Compact is not a legal transfer and is based only on "where is better for patient." This proposal was approved by the Committee.

Division of Mental Health

A proposal that the name be changed from the Division of Mental Diseases to the Division of Mental Health was approved.

State Hospital Names

A proposal that the state hospitals not be termed Nos. 1, 2 and by number but be known by the name of the town in which they are situated, as the Fulton State Hospital, and was approved by the Committee.

Sex Offenders

The following digest of proposed legislation on sex offenders was presented: "An act relating to treatment of sex offenders. This provides for a return of the person to the court for their disposition if the state hospital does not recommend specialized treatment for his mental disorder."

It was pointed out that the state hospitals are unable to treat many of these sex offenders because of their lack of cooperation, and in a few instances they are dangerous enough to create security problems. At present all that the hospital can do is keep these individuals locked up. This proposal was approved by the Committee.

Criminally Insane

The following proposal concerning discharge of non-insane criminals was presented: Proposal providing that discharge from the state hospital of patients found not guilty of a crime by reason of insanity shall be the responsibility of the superintendent and the proper court jointly.

It was pointed out that at the present time the superintendent of a state hospital may discharge a patient not guilty of a crime by reason of insanity (other than in murder cases) without consulting anyone. After brief discussion this proposal was approved.

The matter of improving psychiatric court testimony was discussed. This included possible use of the Durham rule instead of the McNoughton principle, and the institution of some practice providing for independent psychiatric testimony as now used under the Briggs law in Massachusetts. Dr. Duval stated that his office is using every opportunity to advance these proposals, but that the final responsibility must come from the legal profession.

County Patients

A proposed act to abolish the present system of "county patients" in State Mental Hospitals brought forth considerable discussion.

It was pointed out that at the present time about 85 per cent of all patients admitted are "county patients" for which the counties pay $6.00 per month per patient to the hospital involved. The average monthly cost at present is $138.00 per month. The income from "county patients" to all hospitals is about $1,300,000 per year.

Since the original intention was that counties should pay about 25 per cent of the cost, it would be necessary to increase the county share from $6.00 to $34.50 per month per patient.

The Committee agreed generally that the A.M.A. statement of principle pertaining to patient care, namely, that the individual is responsible for the payment of medical expenses and for those of his family is followed by most physicians. When the individual in unable to pay his expenses, the local community or county, the state and federal government, in that order, should be considered as the resources for the payment of medical expenses.

It was pointed out that the elimination of the county or community as a source of payment would remove a cornerstone in the above mentioned set of principles even though the amount paid at present, $6.00 per month, is a very small part of the average cost.

Another point which was stressed was that the proposed legislation makes no differentiation between charity and private patients. All patients would be subject to a means test, which would determine the ability of the patient to pay. Members of the Committee suggested that the state hospitals would be competing with the private practice of medicine unless safeguards were included in the act.

Dr. Duval agreed to insert changes in the proposed law which would clarify the position of the medical profession. Such wording would include a statement that persons who are able to pay for their own treatment, and when private treatment facilities are available, would not be eligible for admission to state hospitals.

Dr. Duval stated that a definite decision had not been reached as to the introduction of this proposed act. He was aware of the fact that the legislature might be limited in its ability to appropriate funds. He stated also that the Division of Mental Diseases has recommended that the farming and dairying phases of state mental hospital operations be eliminated because it is believed that the cost of operating the farms and dairies greatly exceeds the returns. If this is approved, he hopes that the savings may be used for general operations.

Since it is dependent on future decisions relative to the farms and dairies, the legislation probably will not be introduced in 1961. The Committee deferred action on this proposal.

Community Mental Health Services

The following proposal concerning community mental health services was presented:

Proposal to develop community mental health services. Communities may raise funds on a 50-50 basis. A local board will be appointed, but all appointments and policies must be approved by the Director of the Division of Mental Health. These centers will provide preventive services, educational services, consultative services, outpatient diagnostic and treatment services, in-patient psychiatric service in general hospitals, and rehabilitative services. Those able to afford private care are not eligible.

It was pointed out in discussion that there was a divergence of opinion concerning the personnel in the administration of such services, whether it should be from the local level or the state level. It was pointed out that the attitude of the legislature would probably be that if the state contributed funds, that it should have control.

The hope that this program would bring more practicing psychiatrists into the state was expressed.

It was pointed out that probably very few of the proposed community centers will be established because of lack of the necessary local matching funds.

No action was taken by the Committee.

Refresher courses were a part of the program.

Conference on Mental Health

Dr. Haddock presented a brief outline of the proceedings of the Sixth Annual Conference of Mental Health Representatives of State Medical Associations which was held in Chicago at the A.M.A. headquarters in November of 1959.

Mr. O'Brien reported that Dr. Duval had later stated that no attempt would be made to change the present county patient set-up, and that also legislation to provide the community service project might be changed. Efforts will be made by the Division to secure appropriations for additions to the State Schools for Retarded at Higginsville and St. Louis; also an effort will be made to secure sufficient funds to complete the fourth floor of the new building at St. Louis State Hospital.

The possibility that the present trend in work of the Division of Mental Disease toward prevention of disease and whether or not the proposed community service legislation may be leading to conflict with private practice was discussed.

On motion of Dr. Tillman, duly seconded, the report was accepted with the recommendation that the committee carefully examine the finally drafted legislation to the end that patients be referred to community mental health clinics only on referral of physicians.

INFANT AND CHILD CARE

Dr. Schwartz gave the following report for the Committee on Infant and Child Care:

Legislation on Immunization

Legislation on immunization was discussed in general, it being pointed out that pre-school immunization was of great importance with the responsibility resting principally with the parent. It was pointed out that legislation making later immunization compulsory might encourage early immunizations.

Proposed Bill

The following proposed legislation, sponsored by the Missouri Junior Chamber of Commerce, was presented:

An Act

"RELATING TO THE POWERS OF THE STATE DEPARTMENT OF PUBLIC HEALTH: PROVIDING FOR THE IMMUNIZATION OF SCHOOL CHILDREN: PROVIDING EXEMPTIONS: PROVIDING PENALTIES: AND REPEALING R.S. 1939, 8-10341.

"BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSOURI.

"Section 1. IMMUNIZATION REGULATIONS. The Department of Public Health and Welfare shall, after consultation with the Department of Education, promulgate rules and regulations governing the immunization against poliomyelitis, smallpox and diphtheria, to be required of children attending public, private, parochial or parish schools. The immunizations required and the manner and frequency of their administration shall conform to recognized standards of medical practice. The Department of Public Health and Welfare shall supervise and secure the enforcement of the required immunization program.

"Section 2. UNLAWFUL TO ATTEND SCHOOL UNIMMUNIZED—UNLAWFUL TO REFUSE TO PERMIT IMMUNIZATION. It is unlawful for any student to attend school for longer than one month unless he has been immunized, as required under the rules and regulations of the Department of Public Health and Welfare, and can provide satisfactory evidence of such immunization. Provided that, if within the month, he produces satisfactory evidence of having begun the process of immunization, he may continue to attend school as long as the immunization process is being accomplished in the prescribed manner. It is unlawful for any parent or guardian to refuse or neglect to have his child immunized, as required by this section, unless the child is properly exempted.

"Section 3. EXEMPTION FROM IMMUNIZATION. Any minor child through his parent or guardian may file with the health authority charged with the duty of enforcing the immunization laws the certificate of a duly licensed physician stating that the physical condition of the child is such that immunization would seriously endanger the life or health of the child; or upon affidavits from an officer of a recognized religious denomination that such child's parents or guardians are bona fide members of a denomination whose religious teaching requires reliance upon prayer or spiritual means alone for healing. Upon filing of such certificate, the child is exempt from the legal requirement of immunization for a period not to exceed nine months, on the basis of any one certificate.

"Section 4. SUPERINTENDENT—DUTY TO REPORT. It is the duty of each school superintendent, whether of a public, private, parochial or parish school, to cause to be prepared a record showing the immunization status of every child enrolled in or attending a school under his jurisdiction. The name of any parent or guardian who neglects or refuses to permit a non-exempted child to be immunized against diseases as required by the rules and regulations promulgated hereunder shall be reported by the school superintendent to the Department of Public Health and Welfare and the prosecuting attorney or circuit attorney of the county in which the school is located within thirty-five days after the child is enrolled or begins attending.

"Section 5. WHO MAY IMMUNIZE—WHO MUST PAY. The immunization required may be done by any duly licensed physician or by someone under his direction. If the parent or guardian is unable to pay, the child shall be immunized at public expense in a manner to be determined by the Department of Public Health and Welfare and the school superintendent.

"Section 6. SOURCE OF FUNDS. Funds for the administration of this act and for the purchase of vaccines for children of families unable to afford them will be appropriated to the Division of Health from general revenue.

"Section 7. PENALTY. Violation of any provisions relating to the immunization of school children is a misdemeanor."

Legal Report

Dr. Schwartz reported that the proposed bill had been studied by attorneys for the Association and the following report was presented:

"Proposed Immunization Bill of Junior Chamber of Commerce.

"From an examination of a proposed bill by the Missouri Junior Chamber of Commerce, I would like to make the following observations:

"TITLE. The title to the proposed bill repeals R.S. 1939, Sec. 10341, which should more properly be referred to as R.S. Mo. 1949, 163.360, the present identification of the statute. This statute deals with a different subject matter than the title, in that it deals with school attendance while afflicted with any contagious or infectious disease. This statute is needed in view of the compulsory school attendance section R.S. Mo. 164.010, and should not be repealed. If it is repealed, parents of children with infectious and contagious diseases could send such children to school; in fact, the attendance law would require them to.

"ENACTING CLAUSE. The enacting clause of the bill is improper.

"Section 1. Section 1 and the following sections have certain titles to the section which are improper draftsmanship. This section would place the authority for promulgating rules and regulations in the Department of Public Health and Welfare. This properly should be in the Division of Health. By setting out poliomyelitis, smallpox and diphtheria, any other contagious or infectious diseases would be excluded. The requirement extends to public, private, parochial or parish schools. It is questionable whether this legislation should cover private schools as they do not come under any regular state enforcement or regulation. The question of 'recognized standards of medical practice' is one about which there might be much confusion.

"Section 2. The question of 'satisfactory evidence of such immunization' should be spelled out.

"Section 3. The words 'immunization would seriously endanger' might give rise to questionable interpretation; the exemption under 'recognized religious denominations' gives rise to many problems. It is understandable that, to lessen opposition, exemption might be desired for those who do not believe in immunization, but if an immunization law is desired and is to be effective, it should apply to all who attend schools and I think, would come under authority of the general police powers of a legislature.

"Section 4. This section deals with the reporting and the keeping of a record of those refusing to permit compliance with the act and the first stage of the prosecution of such. It does not fix the responsibility of enforcement upon the state division.

"Section 5. This section does not take into consideration proper requirement for private practicing physicians nor does it define those 'unable to pay.' It does not properly place responsibility for either determination or enforcement; it would leave considerable doubt as to procedures.

"Section 6. This is a statement that funds should be appropriated from general revenue, and would eliminate by statute the use of Federal participating funds, if such were available, for that purpose.

"If immunization of school children is a desirable program, it would perhaps be better to have a bill having more teeth in it and made applicable to all children attending public schools.

"Under the police powers of the state, it could be made applicable to all schools; but due to other statutes dealing with the public schools, it would perhaps be best to have two bills, one applying to private schools, the other applying to public schools. The management, organization and control of private schools is not governed by statute, except in rare instances; and statutes dealing with such should not be confused with statutes dealing with public schools. There is involved in this type of legislation a question of constitutionality if it excludes some and does not apply to all. The legislation is either good or bad as a health measure. If it is good, then its fullest benefits will come from a rigid application to all those attending."

Discussion

In discussion it was brought out that there might have to be exclusions in the bill for religious beliefs, although in some states this is not done; the proper placing of policing powers in the bill; whether immunization reports should go to the Division of Health or the Department of Education; the need for a long-range educational program to promote early immunizations by family physicians in connection with such legislation; the use of present law which allows suspension of a pupil "if he or she deviates from normal"; the shortcomings of mass immunizations; the need for some plan whereby children below school age would have immunizations; whether or not the proposed law is a public health function; the help that P.T.A. organizations and women's clubs can give to an educational program.

Action

On motion of Dr. Kinder it was voted that the Committee go on record as favoring such legislation on immunizations as proposed by the Junior Chamber of Commerce but with modifications as brought out in the analysis by the MSMA legal counsel and at the same time expressing the feeling that these immunizations should be at an earlier age. Also, it was felt the Junior Chamber might benefit by studying other states' laws pertaining to immunizations and their experiences.

Members of the Department of Education and the Division of Health who were present, expressed agreement with the motion.

Immunization Levels

Dr. Belden presented charts showing results of immunization surveys of first grade children in 12 counties which were conducted in the spring of 1959 by querying parents of first graders, and approximate levels of immunization coverage of pre-school children conducted by household interviews in the fall of 1959 in Jefferson County, five areas in Kansas City and nine areas in St. Louis County. He pointed out that epidemics are more likely to occur where immunization levels are low. He called attention to the lower level of immunizations under 2 years of age as compared to those by age 6 or 7 and stressed the importance of getting the immunizations started earlier to protect this most susceptible age-group.

Tuberculosis Testing in Schools

Dr. Meinershagen explained that tuberculosis case finding by mobil unit had been discontinued and reported on the pilot case finding study conducted by the Division of Health with cooperation of the medical society in Newton County. This was done by Mantoux test. He explained that it was tied in with school certification and that 49 schools received certification which indicated that 80 to 95 per cent of school children and 100 per cent of school personnel had been checked. He reported that six cases of tuberculosis had been found and that 15 suspects were still under study. He said that McDonald, Randolph and Macon Counties were now conducting surveys and said that it is hoped that more counties will do this. He said that P.T.A. organizations and local TB societies were interested and might spearhead the work in other counties.

One panel dealt with hypnosis.

Discussion

In discussion, the Patch and Mantoux tests were discussed in regard to schools and the private physicians' office; the efficiency of mass testing; the possibility of getting more physicians to test routinely in their offices; the general health education value of such programs.

Action

On motion of Dr. Magness, it was voted that the committee accept the report of the work done in Newton County with appreciation and recommend that a letter go to county society presidents, or chairman of child health committee in counties which have such a committee, calling attention to this work and recommending and urging that consideration of a similar type case finding program be carried out in their counties and also recommending that physicians be encouraged to do testing in their offices. It was recommended that a pamphlet, "School Certification Program for Tuberculosis Control," explaining a Tuberculin Testing Program for schools, go with the letter.

Immunization of Children

Dr. Schwartz asked that all members of the Committee study the situation on immunization of children in their own communities and study possibilities of improving it.

School Health Plan of St. Louis County

Dr. Magness explained briefly a St. Louis County School Health Program which has recently gotten under way. This was developed by the St. Louis County Health Department and the School Administrators of the county. He said that he would report to the Committee later in more detail.

Dr. Schwartz said that he would be unable to attend the A.M.A. Conference on Physicians and Schools and asked that Dr. Magness be designated to attend with expenses paid.

On motion of Dr. Muether, duly seconded, the report was accepted.

On motion of Dr. Stuart, duly seconded, Dr. Magness was designated to attend the conference with expenses paid.

DIVISION OF HEALTH

Dr. Hardwicke expressed appreciation to the Council and the committee which reviewed the report of the Division of Health and the budget that will be requested of the legislature.

Dr. Matthews reported for the committee which studied the report. He said that this year the plan was in effect before the committee was appointed and suggested that next year a committee study the plans before they are put into effect. He said that the request for the next biennium budget had been approved by the committee and moved that the Council approve it. On second by Dr. Barger approval was voted.

CARDIAC DISEASES

Dr. Loyd gave the following report for the Committee on Study of Cardiac Disease:

Purpose

Dr. Loyd stated that the purpose of the meeting was to discuss the question posed by Dr. Hardwicke concerning the use of federal appropriations of heart disease. The question presented was whether or not the Division of Health should continue to furnish grants to St. Louis University School of Medicine for postgraduate medical education or should all funds be utilized for other programs.

Use of Funds

Dr. Hardwicke outlined the possible uses of the federal funds as postgraduate education, furnishing prophylactic drugs for indigent heart patients and furnishing laboratory facilities for diagnosing hemolytic streptococcus. It was pointed out that the funds may be used for any purpose except therapy. Dr. Hardwicke said that all funds could be used on postgraduate education, or that all funds could be used in the other fields outlined but that there were not sufficient funds to carry out each program to a full extent.

Present Program

The present program was outlined as including postgraduate assistance to St. Louis University (the only school requesting this in the last year but others now requesting assistance), a rheumatic fever register and some help with furnishing of prophylactic antibiotics, for cardiac clinics in Kansas City, St. Louis, Children's Cardiac Center, Kansas City, and laboratory service planned to assist physicians in diagnosis of hemolytic streptococcus.

St. Louis University

It was agreed that no change in furnishing funds to St. Louis University School of Medicine be made during the current fiscal year ending June 30, 1961.

Program to Be Outlined

Dr. Hardwicke was asked to supply the committee with a full report on the program now in existence and to give an outline of what might be done with the funds. Committee members would be expected to return comments on the plans.

Cardiac Clinics

Dr. Martt reported that the University of Missouri Medical School was considering establishment of traveling Cardiac Field Clinics which would include case findings, consultative service and epidemiological studies and surveys pertaining to heart disease. This is being considered in part because it is felt that many indigent cardiac patients are unable to make the trip to the Medical Center at Columbia because of financial or physical reasons. Staffing of these clinics would be by members of the staff of the University of Missouri Medical School and it is hoped that a Grant will be obtained from the USPHS to assist with the costs. It is further hoped that portable x-ray equipment of the Division of Health might be available. The possibilities of fluoroscopic equipment being used was discussed. It was decided that this matter be placed before the Council of the Association and that if approved, contact be made with the various medical societies prior to any field trips. It was felt that the Heart Association might assist in making appointments and doing other preliminary work.

The clinic proposed by the University of Missouri Medical Center by Dr. Martt was felt to need more study before implementation and on motion of Dr. Tillman, duly seconded, it was voted to accept the report with the suggestion that the clinics receive further study by the committee and report back to the Council at a later date.

COMMITTEE ON AGING

Dr. Peterson reviewed the history of the White House Conference on Aging, pointing out that the conference was set up by law in September 1958; that on July 17, 1959, Governor Blair appointed a state committee; that at first MSMA participation was advisory only but later was made official. He said that there were 95 persons on the committee and that Dr. Hardwicke was Chairman of the group which wrote the report of Task Force No. 4, dealing with Medical Care; also that Dr. Wilson was one of a seven person committee on redrafting of summaries.

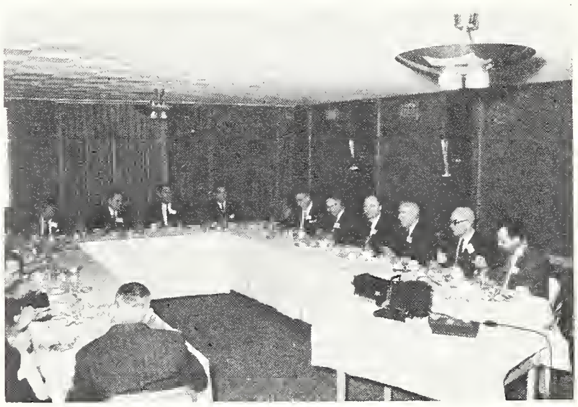
It was pointed out that doctors attended all state regional conferences held and that there were many other persons in various lines of endeavor who opposed compulsory programs which had been advocated by some groups at the various conferences.

Dr. Peterson stated that he felt the Association should actively support the medical assistance act, the Mills-Kerr bill, and urge our legislature to implement the program in Missouri.

On motion of Dr. Stuart, duly seconded, the report was accepted.

VENDOR PROGRAM: "CARE OF THE NEEDY"

The present Vendor program in Missouri, as outlined in House Bill No. 1, as enacted by the legislature in 1959, enabled the state to set up a fund known as a "pooled fund" out of which money may be paid to hospitals or nursing homes. Further, such money may be paid only for the inpatient hospital care of persons requiring hospitalization for medical emergencies or acute serious illness or for nursing home care or at home care for completely bedfast and totally disabled persons.



The Committee on Diabetes and Missouri Diabetes Association held a dinner meeting.

The legislature in 1959 appropriated $3,000,000 of state funds for the pool and the Federal government matched these funds with about $3,500,000 additional funds. At present the state is paying hospitals on a per diem cost basis less costs for x-ray, pathology, anesthesia and physical therapy which are considered medical services. In addition, not more than $100.00 per month may be paid for home or nursing home care of an individual.

The Mills-Kerr bill expands the program and authorizes the states additional federal funds in the event the states create implementing legislation.

Care of the Near Needy

The Mills-Kerr bill provides a new category of "pooled funds" for a class of persons categorized as medically indigent or "near needy." This group of persons includes those who are able to pay most or all of their regular expenses excepting medical expenses.

After discussion of the present "Vendor" program and the new "Vendor" program, outlined in the Mills-Kerr bill, in which the present stand of the Association regarding payment to physicians was outlined, on motion of Dr. Bull, properly seconded, it was agreed that the Council approve of the principles outlined in the Mills-Kerr bill and that the legislature be urged to implement the program realistically in our state, and that the opinion of the Association be made public.

CANCER TEACHING COURSE

Dr. Wilson announced that beginning January 1, under a combined program of the University of Missouri Medical School and the Ellis Fischel State Cancer Hospital, there would be facilities at the Ellis Fischel State Cancer Hospital for short teaching courses for physicians in the diagnosis of cancer.

HEALTH FAIR

It was suggested that the Association obtain information as to the costs of an exhibit at the Kansas City Health Fair in March. The exhibit would portray the activities of the Association in the Student Loan Fund, AMEF, and the preceptor program.

NEXT MEETING

Because of possible legislative considerations, it was felt that an early Council meeting should be held and January 21 and 22 was selected.

DONALD M. DOWELL, M.D., *Chairman*

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Council, Donald M. Dowell, M.D., Chillicothe, Chairman, follows:

Meeting of January 21-22, 1961

The Council met at Hotel Chase, St. Louis, on January 21-22, 1961, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; Charles R. Doyle, St. Louis; John I. Matthews, Jefferson City; Stanley S. Peterson, Springfield; A. P. Rowlette, Moberly; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Oscar P. Hampton, University City; A. W. Neilson, St. Louis; Rolla B. Wray, Nevada; Messrs. John R. Buckner, Springfield; W. H. Bartleson, Kansas City; Hollister Smith, Gene Lunn, Jordan Singleton, Robert Duffee, Ray McIntyre, Tom R. O'Brien, and Helen Penn, St. Louis.

FIELD SECRETARY'S REPORT

Mr. McIntyre presented a chart to the Council showing answers to a questionnaire sent to fourth year students in the University of Missouri School of Medicine, and also gave statistics on previous years. Of the present class of 59 students, 49 expect to go into private practice; 22 expect to do general practice and 35 plan on practicing in a specialty; 52 intend to remain in Missouri; 25 want to practice in a town of more than 100,000 population, 8 in town of less, 15 in town of less than 50,000, 12 in town of less than 25,000, 8 in town of less than 5,000. One student was undecided about the size of the town he preferred. He reported briefly on the preceptorship program and said that this program is trying to be stressed further.

LOAN FUND

Mr. McIntyre reported that at present there has been loaned $16,265 to medical students and that there are 11 additional requests now being processed.

TREASURER'S REPORT

Dr. Doyle gave a report to the Council, including the cash balance as of December 31, 1960, and said that the books were now being audited and that a financial statement would go to the Council, medical societies and delegates early in February. On motion, duly seconded, the report was accepted.

A.M.A. DELEGATES EXPENSES

After discussion, on motion of Dr. Tillman, duly seconded, it was voted that a definite policy be arranged on expenses of A.M.A. delegates. It was agreed that A.M.A. delegates shall be entitled to reimbursement of expenses for first class, round-trip transportation and food and lodging at the A.M.A. sessions and that any request for additional expenses be referred to the Council. It was pointed out that expenses of an alternate delegate should be paid only if he served as a delegate.

COUNCILOR'S EXPENSES

It was pointed out that the by-laws are not entirely clear on expenses of Councilors and after discussion, on motion of Dr. Tillman, duly seconded, it was voted that Councilors shall be entitled to reimbursement of expenses incurred for first class transportation to and from a Council meeting and for food and lodging during the Council meeting.

EDITORIAL BOARD

Dr. Doyle presented the name of Dr. Joseph V. Finnegan, St. Louis, for appointment to the Editorial Board and on motion, duly seconded, this was approved.

DR. DOOLEY

On motion of Dr. Hollweg, duly seconded, it was voted that Dr. Muether be asked to write a letter for the Association to Mrs. Agnes Dooley expressing sympathy in the death of her son, Dr. Thomas A. Dooley, Jr., and expressing the admiration of the Association for Dr. Dooley and his work.

MISSOURI STATE MEDICAL FOUNDATION

Articles of Incorporation and By-Laws for the Missouri State Medical Foundation, which among other things will encompass the student loan fund of the Association, were presented and discussed. Two suggested changes were made, to clarify membership in the Foundation, and to comply completely with Internal Revenue laws.

The changes will cause Article I—Membership, Sec. 1, to read, "Sec. 1. Membership in the Missouri State Medical Foundation shall be composed of and limited to members in good standing of the Missouri State Medical Association."

An addition, in parenthesis, was added to Article VI—Contracts, Funds & Fiscal Matters, Sec. 8, to read: "Sec. 8. Disposition of Assets on dissolution shall be applied and distributed in accordance with the provisions of Vernon's Annotated Statutes of Missouri, Sections 355.230 and 355.235, and (in accordance with regulations of the Internal Revenue Code of 1954 501 (c) (3) and amendments thereto).

On motion, duly seconded, it was voted that attorneys be instructed to go ahead with the incorporation papers and that they be presented to the House of Delegates.

Trustees

It was pointed out that three additional trustees were needed and to the present three, Drs. Muether, Furlow and Doyle, the Chairman of the Council appointed Drs. Tillman, Hollweg and Bull.

The following report of a joint meeting of the Committees on Medical Economics and on Aging was presented, together with their recommendations, as follows:

COMMITTEES ON MEDICAL ECONOMICS AND AGING

Stanley S. Peterson, M.D., Springfield, Chairman of the Committee on Aging, and A. P. Rowlette, M.D., Moberly, Chairman of the Committee on Medical Economics, presided.

Purpose: Mills-Kerr Bill

The purpose of the meeting was outlined as work toward the implementation for Missouri of Public Law 86-788, the Mills-Kerr bill. Attention was called to the action of the Council which was "approve of the principles outlined in the Mills-Kerr bill and that the legislature be urged to implement the program realistically in our state, and that the opinion of the Association be made public."

It was pointed out that the A.M.A. and most states favored implementation of the law; also that method of implementation was left to individual states. It was also brought out that the MSMA House of Delegates had opposed the acceptance of any payments under the vendor program and that only the House of Delegates could change that phase.

Missouri Situation

Figures for Missouri were presented as 470,000 residents over the age of 65; 115,700, or 26 per cent, on old age assistance, with 37,000 of the 115,700 receiving Social Security.

Under the present program the average monthly payment to the 115,700 is $53.05 for subsistence, $6.45 for medical care, with $0.48 going into the vendor pool for medical care, or a total of $60.01, of which the U. S. Government pays 53.42 per cent.

The Mills-Kerr law automatically increased the U. S. Government share of the vendor program by 15 per cent, approximately $100,000 per year.

If state appropriations are increased, it was pointed out that the most advantageous way to utilize additional state funds would be to devote these to subsistence payments and transfer an equal amount of money to medical payments under the vendor program. The government will contribute 53.42 per cent toward additional subsistence payments (up to a total average payment of $65 per month per recipient). The Federal government will contribute 68.42 per cent (53.42 plus 15 per cent) toward vendor medical payments, up to a total of $12 per month per recipient.

Medically Indigent

Programs for medically indigent follow the same general requirements as those for persons on Old Age Assistance with the additional proviso that such programs must include some institutional and some non-institutional care. There is no financial limit to programs must include some institutional and some non-month per recipient for vendor payments under the OAA program). The Federal government will contribute 53.42 per cent of the expenditure on medically indigent programs. The definition of "medically indigent" and the benefits of the program are left to the discretion of the state.

Discussion

Various phases discussed included the increase to per diem payments to hospitals under the present vendor program, the rising number of persons on social security in the older age group, whether "acute illness" and "medical emergency" be retained in any new legislation, the inclusion of "near needy" under the Mills-Kerr law; the advisability of a lien and recovery law and whether that would decrease or increase those on assistance rolls, what a minimal level as set forth in the Mills-Kerr law might be, the need for a medical advisory set-up in any legislation, the probability that people are getting adequate care in the larger centers but may not be in sparsely populated areas thus making it necessary to go to the state level for care, publicity on action of the committees or of the Council, that doctors still are willing to give medical care to the needy but do not want to be obstructionists, that study should be given to what a minimum should be, that subsistence allotment is not sufficient at present, that "emergency" might well be changed to "necessity."

Action

On motion of Dr. Peterson, duly seconded, it was voted that the staff be asked to prepare recommendations embracing the minimum requirements of the law, unless study finds these to be inadequate, making clear that physicians are not to be paid, that it is recognized that the law is socialistic but also is a compromise and that the problem is not as great as it is made out to be but is worthy for those few to whom it does apply.

Delegates Informed

It was decided that county societies be informed on the Mills-Kerr law and its implications and that they be asked to instruct their delegates to the Annual Session on action to take.

Recommendations of the Committees on Medical Economics and Aging

While it should once again be emphasized that the medical profession, through its experience and its service as provider of care to the sick, knows that the problem of medical care for the aged is not as great as has been pictured in some quarters, the Committees recognize that society will always include some individuals who are unable to provide the necessities of life for themselves.

The Committees, therefore, recommend that the Missouri State Medical Association support the principles of the Mills-Kerr Law and urged the legislature to implement the law in Missouri.

At the same time, the Committees recommend that the Association continue the policy enunciated in 1958 by the House of Delegates—that physicians not receive government funds as payment under the so-called "vendor" program for medical care of the indigent—and that this policy be extended to apply to the implementation of the 1960 Mills-Kerr Law in Missouri.

The Committees feel, however, that most of the people who might come under these programs in Missouri have no real wish to become complete wards of the state. They wish to retain their self-respect and pride and to do what they can to maintain themselves through their own efforts or through their families. The Committees believe that all parties—individuals, organizations and government—should use every means to discourage the concept of reliance on welfare programs to pay all costs for all purposes, and to encourage, on the other hand, individuals, their relatives and their friends to accept the personal responsibility to pay what they can toward their living expenses, including medical care where necessary. If outside help then becomes necessary responsibility should, in each instance, be accepted by the local community and county governments.

In the administration of programs implementing the Mills-Kerr Law, the Committees recommend that the Association urge the legislature to continue the official representation of medicine in an advisory capacity through statutory provisions similar to those contained in the present "vendor" program.

As a further general recommendation, the Committees feel that the legislature should be urged to enact a Lien and Recovery Law in Missouri to discourage potential abuse of public assistance programs and encourage acceptance of responsibility for the support of individuals by their families.

At the present time, the "vendor" program for medical care for public assistance patients includes individuals under four programs—Old Age Assistance, Aid to the Blind, Aid to Dependent Children, and Aid for the Permanently and Totally Disabled. The program provides for increased assistance payments, up to $100 per month, to patients who are permanently and totally bedfast whether confined at home or in a nursing home. It provides also for payments for hospital care in cases of medical emergency or acute serious illness.

State appropriations for the nursing home phase of the program were $1 million a year for the 1959-61 biennium, with another $500,000 a year appropriated for the hospitalization phase.

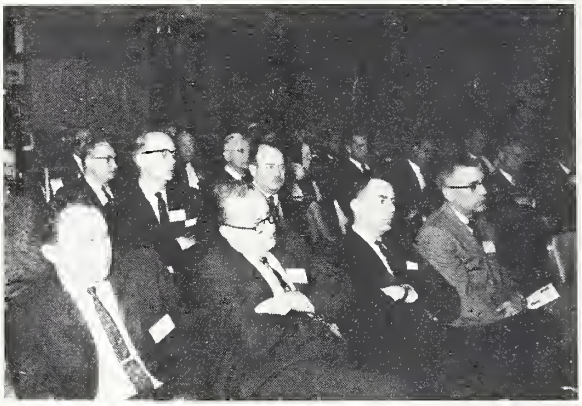
When the program was begun, payments to hospitals were made on the basis of $5 per day, up to 14 days per confinement, for these patients. Later, this was increased to $10 per day, and payment is currently being made on the basis of the hospital's per diem cost, for up to 14 days per confinement.

The original $500,000 per year appropriation, however, is not enough to continue payments to hospitals on this basis. According to the estimate of the Director of the Missouri Division of Welfare, a total of $2 million a year would be needed for this phase of the program.

The Committees recognize the financial situation of the state in regard to appropriations and taxation in the next biennium. They recognize that there will be requests for substantial appropriations for other worthwhile programs, both in health and other fields. They recognize that money payments to Old Age Assistance recipients are now close to minimum subsistence levels.

With consideration of these and other factors, in view of the need of hospitals to recover their expenses of providing care for patients, and with consideration of the magnitude of the appropriation needed, the Committees therefore recommend that the Association support the implementation of the Mills-Kerr Law specifically through encouraging the appropriation of sufficient additional state funds, which, with matching Federal money, will enable the continuance of payments under the program to hospitals on the basis of their per diem costs.

Statistics on the present situation in Missouri, a digest of the Mills-Kerr bill (Public Law 86-788) and implications for Missouri were presented.



Sessions were well attended.

After discussion, on motion of Dr. Furlow, duly seconded, that the recommendations of the Committees be accepted, changing the per diem cost of hospitals to "reasonable cost" was defeated by a vote of six to four.

On motion of Dr. Bull, duly seconded, it was voted to accept the recommendations as presented, by a vote of six to four.

HANDBOOK

On motion of Dr. Furlow, duly seconded, it was voted that the report and the recommendations be placed in the Handbook for Delegates.

CORPORATE PRACTICE

Dr. Muether presented the following report of the Committee on Corporate Practice:

Pursuant to the action of the House of Delegates at the 1960 Session, the special Committee on Corporate Practice during the year has attempted to initiate the wide-scope study of corporate practice in Missouri envisioned in last year's report of the Committee to the Council and the House.

This study was to encompass such elements as the extent, patterns and trends of corporate practice in the state, the impact of such practice on patients, institutions and medical practitioners and identification of particular instances of corporate practice actually in existence.

The intent was to engage an outside research organization experienced in social research to undertake the study.

A number of research organizations have been investigated in the past months, with disappointing results.

Typical of these was a nationally known research firm in St. Louis which decided that such a study would not be feasible for its organization to undertake since the skills and experience called for are unusual and not readily available to them.

Other types of organizations were also contacted, including those in the accounting and management fields.

These in general felt that they could not make such studies for the Association without concurrent invitations from the governmental bodies, institutions and organizations which might be involved.

While university social science groups had also been suggested as possibilities in undertaking the study, there is doubt on the part of the Committee that such an agency could effectively be utilized.

Through these experiences, it has now become the sense of the Committee that the best way to proceed is to invite directly the views of the members of the staffs of certain of the institutions felt to have elements of corporate practice in their activities as to what patterns and degrees of corporate practice are compatible with the private practice of medicine.

Preliminary work has been done toward this end, and the Committee is prepared to launch this phase of study in the near future.

In discussion, two legal cases involving corporate practice, one in 1907 and a more recent one in Iowa were recounted; the difficulty in the definition of what is corporate practice; the involvement only of the cities and not the rural sections of Missouri; and that probably a court definition of "corporate practice" would be necessary before real work could be done by the committee.

On motion of Dr. Stricker, duly seconded, the report was accepted.

MISSOURI HOSPITAL ASSOCIATION

A meeting with representatives of the Missouri Hospital Association was reported. Those present representing MSMA were: Drs. Muether, Hollweg, Summers and Mr. O'Brien.

It was reported that discussions had been rather general and concerned possible legislation which may be presented to the legislature.

LEGISLATION

Three bills that have been introduced in the House of Representatives were reported: H.B. 6, establishing a Commission on Aged, consisting of 15 members; H.B. 83 establishing compulsory commitment of persons with tuberculosis (which has been introduced in several legislatures but has not passed; and H.B. 133 on chiropractic.

Information was presented on proposed bills, not yet introduced, to create a monopolistic state fund for Workmen's Compensation and one on provision of a state fund Temporary Disability Law, explaining the meaning of such legislation. The possibility that these acts may be presented have been brought to the attention of the Committee on Industrial Health.

UNIVERSITY BUDGET

Mr. O'Brien read a letter from Dr. Wilson setting forth information concerning the budget requested by the University of Missouri School of Medicine. Dr. Wilson discussed the problem further pointing out that the hospital could lose accreditation, that if beds should have to be closed it would influence the number of students that the medical school could take.

It was stated that a newsletter on legislation would go to all members in the near future and that information about the medical school needs would be included.

ANNUAL SESSION

Dr. Matthews spoke briefly concerning the program and special events of the Annual Session and gave the list of special guests.

PUBLIC SERVICE

Dr. Muether presented the following report, together with figures on advertising costs:

Public Service Program

It will be recalled that the 1960 House of Delegates adopted a resolution providing that "the Council be authorized and instructed to institute immediately an intensive program of public relations emphasizing the positive programs of the medical profession . . . and that each county medical society be urged to take immediate measures to institute on a local level through local press media an educational advertising program emphasizing the guarantee of Missouri physicians that no individual in this state shall be without the services of a doctor for the lack of financial resources."

At its meeting on the final day of the 1960 annual session the Council acted immediately to implement this resolution. An initial budget of $15,000 was appropriated to launch the new program, and a special committee of Council members was appointed under the chairmanship of Dr. Muether to set policies and guide the work. Members of the special Public Service Committee were, in addition to the chairman, Drs. Furlow, Summers, Tillman, Doyle, Hollweg and Dowell.

In practice, however, the entire Council at its regular meetings supervised all developments in the Public Service Program. These are summarized below.

The two essential elements of the resolution as adopted were: (1) The assumption that the doctors of medicine as a whole were as a matter of fact holding out a guarantee of medical service to all without regard to payment and (2) the assumption that they would wish to publicize this guarantee locally by advertising.

The two first steps taken by the staff were to explore these two assumptions. Some 30 or 40 physicians, largely in rural areas, were interviewed at length. It at once became apparent that individual practicing doctors had little enthusiasm for making an advertised guarantee of the availability of their free service. Two staff members visited the A.M.A. in Chicago to find what had been done by other state and local societies in this general area. A detailed study was also made of advertising media and costs.

On the basis of the staff's analysis of the situation in the light of the above studies, the Public Service Committee determined that the basic objective of the resolution—namely, to win a public opinion more favorable to the medical profession in the state—could not be achieved by the direct and immediate means proposed in the language of the resolution. First, it seemed clear most doctors did not favor advertising a blanket guarantee of service. Second, the cost of advertising to do an effective job would have been beyond the means of most local societies and equally beyond the resources of the state association.

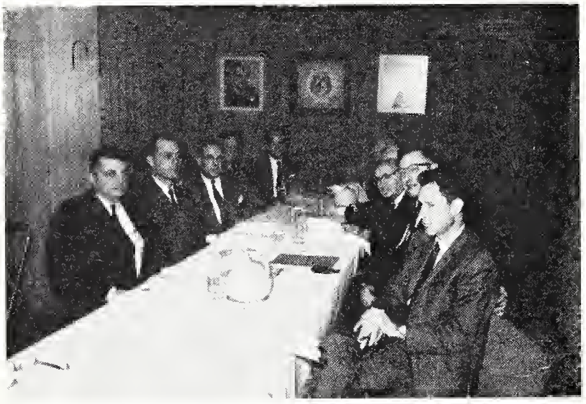
It was, therefore, determined by the committee and the staff to see how the purposes of the resolution might be achieved by other means. As a basic guide, they adopted the essential principle that any plan aimed at publicizing "the positive programs of the medical profession" had to be based on real news of real programs, and that such programs had to be acceptable to individual county societies.

The immediate next step was to ask each county society in the state to appoint a public service committee of its own, through which the state committee might transmit for local consideration suggestions and programs for activities that would lay a foundation for constructive publicity to influence public opinion. Of the 52 societies in the state, 26 appointed such committees. At the same time, publicity activities at the state level were increased to the maximum possible, pending the fuller development of the program.

The objectives and elements of the program were restated to be: Increase public awareness of the profession's promotion of better health care; strengthen public realization that physicians' services are available to all and available in emergencies; emphasize the efforts of the profession to assure adequate numbers and distribution of physicians; increase public recognition of the efforts of the profession to assure adequate care for the indigent and the aging.

The following steps were taken to implement the program as thus redefined:

1. *Publicity*. News releases, generally very well received, were made on the honor medical student awards, the Missouri University preceptorship program, the A.M.E.F. campaign, the new student loan fund, the annual meeting of the Woman's Auxiliary, as well as a detailed account of the over-all Public Service Program for MISSOURI MEDICINE.



The Committee on Control of Venereal Disease met during the year.

2. *Program materials*. For the reference of local society public service committees, materials were assembled from the A.M.A. and other sources outlining possible ways to set up and operate an emergency call system and a guarantee of service program at the community level. A.M.A. materials describing constructive national programs of medicine were screened for wider use in physicians' waiting rooms.

3. *Indigent care studies*. With the cooperation of local society public service committees, questionnaire surveys were made of provisions and facilities for indigent and medically indigent patient care in the following counties (the studies were relatively extensive in the case of those first listed, and, as might be expected, relatively simple in the others): Adair, Boone, Clay, Clinton, Greene, Howard, Jasper, Pettis and St. Louis County. Also Crawford, Dallas, Henry, Hickory, Knox, Marion, Monroe, Montgomery, Nodaway, Polk, Putnam, Schuyler, Sullivan and Texas.

In general, these studies make it clear that much can be done at the local and community level—with increased application of county funds—in order to achieve significant improvements in local arrangements for the adequate care of the indigent, medically indigent and the aged.

4. *Directory of Health Resources*. Detailed working plans have been completed, and the Woman's Auxiliary has undertaken the important task of assembling detailed information on the availability of all facilities, finances and services for health care in all areas of Missouri. When this work is complete, we shall have an excellent over-all picture of where the real problems are, and every physician will have a handy manual for his guidance in referring patients in need of particular kinds of care or help.

5. *Student loan fund*. At its May, 1960, meeting the Council voted an appropriation of $25,000 to establish a fund for loans to medical students who are residents of Missouri. Such a plan had been discussed originally in February, 1960, and it was felt that this would be an important element in the over-all Public Service program. The Council has supplemented its initial grant of $25,000 to the fund by a second grant of the same amount. A questionnaire survey has been made of all other student loan funds supported by organized medicine in the state, and the suggestion was made to local society public service committees, in the three societies which have funds in existence, that they increase efforts to publicize their programs.

Conclusion for Consideration of the House of Delegates

At its December meeting, the Council considered the over-all policy of the Association in regard to care for the aged and the indigent in the light of the newly enacted Mills-Kerr law and pending legislation of the Forand type in Congress.

For consideration both of policy and of cost, the Council voted to discontinue the Public Service Program as such, though more intensive efforts in the area of publicity are to continue as is the Auxiliary's work in compiling the Directory of Health Resources. The Association's support of the student loan fund has been increased. Local society public service committees continue in existence.

The budget provision for public relations services has been reduced to the $9,000 yearly figure that was in effect before the initiation of the Public Service Program. In the months that the program was fully active, expenditures for public relations services were authorized at an annual rate of twice this figure. The total cost of the Public Service Program from the last annual session through December, 1960, was $9,590.21, including all fees and expenses.

This detailed report to the House aims to make it clear to delegates how elements of the Public Service Program evolved and how the program was carried forward in response to the resolution of the House last year.

The situation now appears to be this: If there is to be a major public relations effort to improve public understanding of the medical profession in Missouri, there will need to be definite action programs at both state and local levels. Something can be done with publicity alone based on our existing programs.

If more public relations effort is to be worthwhile, however, it must be based on further soundly conceived action programs by which organized medicine in the state will take the lead in improving facilities and arrangements for indigent care and in urging more adequate financial support at the county level.

In the long run it is certain that, if care for the indigent and aged is paid for more and more by state and, then, Federal government, the trend is bound to continue away from the practice of medicine as we know it. The only ultimate solution is for the local community, the family, neighbors and local government to take on the job.

The question for the House is to consider whether it is the task of organized medicine in Missouri to try to lead a trend back to local responsibility; whether it is practical to try to do so now that the opposite trend has gone so far; whether the now discontinued Public Service Program was headed practically speaking in the right direction; whether any real results could be expected from this program or any like it; whether MSMA and local societies can afford the money it will take, and, finally, whether individual doctors can afford the time or give the interest and the effort on which the success of any such program must ultimately depend.

On motion of Dr. Tillman, duly seconded, the report was adopted.

WHITE HOUSE CONFERENCE

Drs. Peterson and Hardwicke reported on the White House Conference on Aging. They explained that there were 10 groups with subjects for discussion and that medical care was never considered as a separate item and that doctors were not really given a chance to be heard. There were approximately 270 doctors in the conference, some representing other interests than the medical profession in general. It was said that in one small group a vote concerning legislation for the aged, 14 voted for care to come under Social Security and 10 against, and in a larger group the vote was 170 to 99.

Dr. Peterson had been assigned to the section on "Income Maintenance" and Dr. Hardwicke to the section on "Medical Care." Dr. Peterson said that he would present a further report when he had had time to prepare it.

On motion of Dr. Muether, duly seconded, Drs. Peterson and Hardwicke were thanked for their efforts and reports.

VENEREAL DISEASE

Dr. Neilson presented the following report for the Committee on Control of Venereal Disease:

Committee on Control of Venereal Disease

The Committee on Control of Venereal Disease met at the Missouri Hotel, Jefferson City, January 11, 1961. Members in attendance were: Drs. E. M. Powell, Robert Bristow, A. W. Neilson, and E. M. Cannon. Others in attendance were: Drs. E. A. Beldon, William Meinershagen, J. P. Russell, Mr. Tom Dundon, Mr. Wilson Corcoran, Division of Health; Mr. Ray McIntyre of the State Medical Association staff and Dr. Hollis Allen of the Committee on Laboratory Medicine of the Association.

The reporting system on positive VDRL, tests from private laboratories by number was discussed. Dr. Allen and the members agreed that the laboratories had no increased difficulty, other than the actual work of sending the reports. There were 174 private laboratories reporting. The State Health Department stated that in general it was pleased in that although the number of positive reports was lower, 65 per cent were cases that had not been previously reported, 25 per cent were previously reported, and 10 per cent were false positives. The disadvantages of the number system to the State Health Department were: (1) The difficulty of carrying out a follow-up and epidemiological study where only a number is used for identification. If the private physician has already filed this number on the patient's record it is left to his memory. (2) The inability to check repeated positive serology on the same person, therefore making the statistics inaccurate and added work and bother in attempting to follow-up on the same patient. Because of these disadvantages a motion was made by Dr. Neilson and seconded by Dr. Bristow that a pilot study be set up in St. Louis, using both name and number. This was to be presented to the St. Louis Medical Society for its approval by Dr. Neilson and Dr. Cannon.

The question was raised as to what procedure was used in patients with positive serology who were out of state. The Committee was assured by the Health Department that the same procedure would be followed as with in-state patients, and that no follow-up study would be made without the approval of both the consulting and referring physician.

The question was raised of the percentage of false positive examinations. Dr. Allen and Dr. Neilson discussed the VDRL as being a valuable screening test only, and Dr. Allen stated that in his laboratory a positive VDRL is followed by a Kahn and if necessary a Reiter fixation before a positive report is submitted. Dr. Neilson recommended, seconded by Dr. Bristow, that Dr. Allen submit a proposal to the Committee on Laboratory Medicine of the Association that this be a routine procedure in order to avoid as nearly as possible the false positives that can occur with this test.

The question of premarital VDRL was discussed. A recommendation from Dr. Shapiro of the St. Louis Health Department was read. The number of cases which were reported by the Health Department was listed. In 1960 there were 36,000 serologies submitted with a reactive rate of 8 per cent. The Committee would like to bring to the attention of the Council that it feels the present premarital law is inadequate and that the signature of the local physician should accompany the result of the serology. This recommendation was made because many approved laboratories are not run by physicians. Many negative reports have the physician's name without his knowledge, and only by the actual doctor's signature can the reports be known to be accurate. This has an added advantage, that of contact by the physician for marriage counseling and guidance where needed.

It was also recommended to the Council by this Committee that it revise its stand and endorse the fee for treatment of syphilis on a limited basis in areas where conditions warrant it and where the local physicians desire it. On the recommendation of the Health Department, the Committee asked the Council last year to rescind this service. This has been found to be disadvantageous to the Health Department by lack of cooperation in the follow up of patients and the failure of some patients to receive treatment.

On motion of Dr. Muether, duly seconded, the report was adopted.

DELEGATES HANDBOOK

The material to be included in the Handbook for Delegates was discussed.

DELEGATES

Dr. Hampton asked that Councilors attempt to get counties in their districts to elect delegates early enough that they can become conversant with material to come up, also that they could be reported the sixty days before the session as is set out in the by-laws and which makes possible the selection of reference committees prior to the session. He also asked that material to be presented to the House of Delegates be presented prior to the time of the session. It was pointed out that the by-laws of some societies set the time for elections and earlier elections would have to await a change in those by-laws.

HONORARIUMS

Dr. Matthews spoke briefly on honorariums for guest speakers at annual sessions, saying that these were becoming more universal. He asked that the Council consider it and take action at the next meeting.

HEALTH FAIR EXHIBIT

The possibility of exhibiting at the Health Fair to be held in Kansas City, which had been discussed at the last Council meeting, was discussed further. It was estimated that the cost of the exhibit could go as high as $1,500.

On motion of Dr. Muether, duly seconded, it was voted that the Council appropriate not to exceed $1,500 for an exhibit at the Health Fair.

Donald M. Dowell, M.D., *Chairman*

The Speaker referred the portions of the Council report dealing with legislation, plans for the aged, public service programs and related subjects to the Reference Committee on Miscellaneous Affairs. The remainder of the report of the Council was referred to the Reference Committee on Reports of Officers.

SUPPLEMENTAL REPORT OF THE COUNCIL

Donald M. Dowell, M.D., Chillicothe: I wish to present the following resolutions as a part of the Council report:

Whereas, The profession of medicine and the Missouri State Medical Association have a strong and abiding interest in the problems of safety and accident prevention, and

Whereas, Medicine is deeply concerned with traffic accidents as one of the nation's leading causes of injury and death, and

Whereas, The Missouri Safety Council has developed and caused to be introduced in the state legislature a new traffic safety program in an effort to reduce motor vehicle accidents, and

Whereas, Missouri Governor John M. Dalton has endorsed this program and given it his active support, therefore be it

Resolved, That the Missouri State Medical Association House of Delegates commend those responsible for this program for their far-sighted interest in the safety and welfare of Missouri citizens, and be it further

Resolved, That special commendation go to Governor Dalton for his support of traffic safety for the public good.

The Speaker referred this resolution to the Reference Committee on Reports of Officers.

Whereas, The four county medical societies of Jackson, Clay, Wyandotte and Johnson have undertaken the sponsorship of the Greater Kansas City Health Fair, and

Whereas, This project has meant countless hours of effort and work on the part of the physician members of these societies, and

Whereas, The Greater Kansas City Health Fair brings to the citizens of the Kansas City metropolitan area an unsurpassed opportunity to see and benefit from an outstanding display of advances in the health care field, therefore be it

Resolved, That the House of Delegates of the Missouri State Medical Association sincerely commends these four county medical societies for their excellent work in developing and staging the fine Kansas City Health Fair.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Whereas, S. 909 and H.R. 4222, known as the Anderson-King Bills, have been introduced in the Congress to implement the Administration proposals, including the provision for administration under the Social Security system, and similar bills may be proposed, and

Whereas, Any program for health care of the aged or other groups in our nation which uses the Social Security system for administration, operation or taxation is bound to result in poorer quality medical care for the people at greatly increased costs, and

Whereas, Available voluntary and private means of providing health care programs for our citizens are vastly superior to the Federal programs proposed on a compulsory basis, therefore be it

Resolved, That the physicians of Missouri, through the House of Delegates of the Missouri State Medical Association, hereby register their opposition to the proposals to provide Federal health care programs through the Social Security system for any groups of the people, and, be it further

Resolved, That copies of this resolution be sent to the President of the United States and the members of the Congress from Missouri.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

R. O. Muether, M.D., St. Louis, President, announced the Committee on Nominations as follows:

Committee on Nominations

E. D. Imes, M.D., Maryville.
Landis Y. Davis, M.D., Canton.
Don C. Weir, M.D., St. Louis, Chairman.
George Wulff, M.D., St. Louis.
G. W. Winn, M.D., Boonville.
Rolla B. Wray, M.D., Nevada.
Ralph Perry, M.D., Kansas City.
J. P. Ferguson, M.D., Springfield.
H. W. Carrington, M.D., Lebanon.
Fred J. Biggs, M.D., Poplar Bluff.

Joseph C. Edwards, M.D., St. Louis: I would like to present a resolution.

Resolved, That the House of Delegates of the Missouri State Medical Association approve the compilation of a letter containing factual material and all of the latest data on old age health plans, and excerpts from the letter of Hon. Thomas B. Curtis, U. S. Congressman from the 2nd District, St. Louis, Missouri, and Hon. Durward G. Hall, Springfield, Missouri, citing facts regarding this problem that should be called to the attention of every citizen of this country, and be it further

Resolved, That the House of Delegates direct the Missouri State Medical Association staff to reprint and disseminate such material to all members for use before service clubs and public meetings, thereby getting better news notices than by the usual news releases, and be it further

Resolved, That the Missouri State Medical Association should propose to the American Medical Association that the AMA carry on such a program to reach every member in the 50 United States. This information should include emphasis on the encouragement in homes, schools, unions and business organizations of a program of individual savings rather than a dependency on the federal government for total care and pensions.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

Fred L. Wommack, M.D., Crane: I would like to present a resolution.

Whereas, The American Medical Association has requested vigorous action of every state medical association in implementing the provisions of the Kerr-Mills Law (including Medical Assistance for the Aged), and

Whereas, This requested action was reported to the Council of the Missouri State Medical Association and the Council approved the principle of the Kerr-Mills Bill and referred it to the Committees on Medical Economics and Aging for recommendations on implementation, and

Whereas, The recommendation of these Committees as approved by the Council was in essence, that "The Association support the (minimum) implementation of the Kerr-Mills Law specifically through encouraging the appropriation of sufficient additional state funds, which, with matching Federal money will enable the continuance of payments under the program to hospitals on the basis of their per diem costs," and

Whereas, This minimum implementation of Medical Assistance for the Aged represented the maximum compromise that could be agreed upon by the Committees studying this problem, and

WHEREAS, The endorsement of this position by the House of Delegates will for the first time place this Association on record as believing that a single provider of Health Care is entitled to full reimbursement by the Government for the care of the indigent before other providers in the health care program have been considered, and

WHEREAS, This action will not produce the results desired by the American Medical Association as outlined at the December 1960 AMA meeting, therefore be it

Resolved, That the Reports of the Joint Committees on Medical Economics and Aging and the Committee on Aging, as approved by the Council, be *not* approved by this House of Delegates, and be it further

Resolved, That this House of Delegates approve the principle of the Kerr-Mills Bill and recommend to the Missouri Legislature that the provisions of this law be fully implemented in our State in order of need, and be it further

Resolved, That the Governor be urged to appoint a committee to study this matter and determine the need, using expert advice available from the Missouri State Medical Association.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

W. W. GIST, M.D., Kansas City: I would like to present the following resolution.

WHEREAS, The proper scientific study of many illnesses requires a compilation of many cases from individual records and

WHEREAS, Such compilations are often made difficult by the threat of records being used for other purposes, such as evidence in malpractice suits and

WHEREAS, In an effort to encourage scientific studies, many state legislatures (Ohio, Minnesota, Michigan, California, South Dakota, Massachusetts) have passed confidentiality statutes designed to prevent other uses of such records, therefore be it

Resolved, That the House of Delegates recommend to the Council of the Missouri State Medical Association that they

(1) Formulate a confidentiality statute to encourage scientific studies that have as their purpose the reduction of morbidity and mortality in the State of Missouri and

(2) Take appropriate steps to see that such a law is introduced into the Legislature as soon as possible and

(3) Actively support the passage of such legislation.

The Speaker referred this resolution to the Reference Committee on Medical Education and Public Welfare.

GEORGE J. L. WULFF, M.D., St. Louis: I wish to present a resolution.

WHEREAS, Effective emergency medical care at the scene of accidents on streets and highways is known to be essential to the best interests of the injured, and

WHEREAS, Emergency medical care (splinting of fractures, arrest of hemorrhage, dressing of wounds, rendition of emergency oxygen, etc.) requires only trained ambulance personnel, adequate equipment on ambulances (this includes all casualty-carrying vehicles functioning as ambulances), and proper motivation of ambulance and law enforcement personnel towards effective emergency medical care, and

WHEREAS, Surveys under the direction of the National Safety Council have shown that emergency medical care is of the best quality where it is required by state statutes or municipal ordinances, and

WHEREAS, The State of Missouri has no such state statute, and few, if any, municipalities have such ordinances, even though several other states and municipalities apparently as a result thereof are said to have more effective emergency medical care, and

WHEREAS, It is common knowledge among members of the Missouri State Medical Association that few street and highway casualties have had little, if any, emergency medical care before arriving at a hospital, and

WHEREAS, The National Safety Council and the American College of Surgeons have established minimum requirements for training in first aid of ambulance and law enforcement personnel and minimum requirements for the equipment of ambulances, therefore be it

Resolved, By the House of Delegates of the Missouri State Medical Association in their 1961 annual session at Kansas City, Missouri, that the State of Missouri should have a statute and the municipalities therein should have ordinances requiring adequate training of ambulance personnel, adequate equipment on ambulances, and adequate rendition of emergency medical care at the scene of accidents as recommended by the National Safety Council and the American College of Surgeons, and be it further

Resolved, That a copy of this Resolution be forwarded to the Governor of Missouri and through the component Societies of the MSMA to the mayors, city managers, and comparable municipal officials throughout the counties of the State of Missouri.

The Speaker referred this resolution to the Reference Committee on Resolutions.

JOHN P. FERGUSON, M.D., Springfield: I have a resolution to present from the Greene County Medical Society Delegates.

WHEREAS, At the 1960 Annual Session of the Missouri State Medical Association the Greene County Delegates presented a resolution calling for the implementation of an intensive program of public relations emphasizing the positive programs of the medical profession, and

WHEREAS, According to the report of the Council as published in the Handbook, on the basis of interviews with approximately 1 per cent of the Association it was determined that "individual practicing doctors had little enthusiasm for making an advertised guarantee of the availability of their free service," and

WHEREAS, Specific, concrete, positive programs were entered into partly as a result of the resolution from the House, such as the publicity, program materials, indigent care studies, directory of health resources and student loan fund programs as are outlined in the Council's report, and

WHEREAS, Specific requests have been made of the House of Delegates by the Council as outlined in the last paragraph of the report, therefore, be it

Resolved, That the Council be clearly instructed by this House of Delegates that the membership of this Association does regard it as the task of organized medicine in Missouri to emphasize local (county and state) responsibility for medical care of those who cannot afford such care for themselves and it is not our belief that a negative defeatest attitude is justified because the "trend has gone so far," and be it further

Resolved, That the Council be informed that this House of Delegates believes that practical, positive results were achieved through increased news releases on the programs of the Association, through presentation of program materials and A.M.A. pamphlets to local Societies, and the other programs outlined in the roport and that this program "was headed practically speaking in the right direction" and that real, tangible, good can be accomplished by "this program (and others) like it," and be it further

Resolved, That the Council be instructed and reminded that there are many programs which were entered into this past year requiring little cash outlay but which resulted in much favorable publicity (i.e. news releases on honors medical student award, the preceptor program, etc.) and that at a minimum, "individual doctors" must "afford the time" and "give the interest and the effort on which the success of such programs must ultimately depend."

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

F. T. H'DOUBLER, M.D., Springfield: This resolution is presented from the Greene County Medical Society Delegates.

WHEREAS, The House of Delegates of the Missouri State Medical Association has gone on record as opposing the inclusion of physicians fees under the Vendor program in Missouri and

WHEREAS, Services rendered by hospitals and other medical ancillary services are covered for payment under this and other

The committees on Rural Medical Service and Medical Education and Hospitals met jointly during the year.

government financed medical care programs for the indigent, and

WHEREAS, Physicians have always given their personal services to the needy, reducing their fees to suit the patient's ability to pay, and

WHEREAS, In December 1960 the House of Delegates of the American Medical Association "reaffirmed the physician's right to a reasonable fee for medical services, particularly home and office care, rendered to patients for whose care the government has assumed financial responsibility, recognizing the profession's right to reduce or forego fees for these patients at its own discretion, through negotiation with welfare agencies, or in the interest of public economy or improvement of some other sector of the indigent care program," and

WHEREAS, Present cost estimates of the Vendor Program do not reflect true costs of medical care for these people because no physician fees are included, and

WHEREAS, Once physicians permit such programs to become formally established, estimates of the cost of medical care ignore the degree to which the medical profession subsidizes care for the needy, a degree not approached by any other professional group and certainly not by suppliers of the basic necessities of food, clothing, and shelter, therefore be it

Resolved, That we reaffirm our stand that the doctors of the State of Missouri will continue to provide the services of physicians for those without means, and be it further

Resolved, That the Missouri State Medical Association rescind its previous action and encourage the payment of physicians for services rendered to those who are covered by any level of government-financed medical care programs including Vendor.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

There being no further business, the session recessed at 3:25 p.m.

Monday, March 20, 1961

The House of Delegates convened at 4:00 p.m. in the Colonial Ball Room, Hotel Muehlebach, Kansas City, with Oscar P. Hampton, M.D., University City, Speaker, presiding.

John F. Bowser, M.D., Kansas City, reported for the Committee on Credentials.

AMEF PRESENTATIONS

R. O. MUETHER, M.D., St. Louis: Mr. Speaker, Members of the House of Delegates: I would like to present what might be termed a supplement to the report of the Committee on the American Medical Education Foundation.

I regret very much that Dr. James Murphy, the chairman of the AMEF Committee, is unable to be here. I think he is the one who deserves to give this part of the report.

Each October, as you know, the Committee for AMEF conducts a campaign among the physicians of Missouri for contributions to medical education. Donations to AMEF may be undesignated, or they may be earmarked for a particular school of the physician's choice.

It is my distinct pleasure now to present the results of the AMEF campaign—not only for Missouri, but for the rest of the nation—as they pertain to the three medical schools in Missouri. Better still, I can present the results in tangible form—in the form of these three envelopes.

With the indulgence of the House, would Dr. Vernon Wilson, Dean of the School of Medicine at Missouri University; Dr. Dermott Smith, Assistant Dean, St. Louis University School of Medicine, and Dr. Stanley F. Hampton, representing Dean Dempsey of Washington University School of Medicine, please come forward.

I should perhaps explain that the undesignated contributions to AMEF are pooled and divided equally among all the medical schools in the country. This year the grant from undesignated funds to each school amounts to $5,208.50—an increase, incidentally, of almost $300 over the sum available last year.

In addition, each school, of course, receives the contributions that have been earmarked for it by the donors. Dr. Wilson suffers somewhat in this regard since the school at Missouri University is new and has relatively fewer alumni.

To Dean Wilson and Missouri University, on behalf of AMEF and the medical profession, I am happy to present this envelope, representing a total AMEF grant of $7,312. Dr. Smith, for St. Louis University, $16,557, and Dr. Hampton, for Washington University, $20,348.

The total contribution by the medical profession to our three Missouri medical schools this year through AMEF—over and above direct gifts to the schools—thus amounts to more than $44,000. In future years, may it be a great deal more.

Dr. W. D. English, Cardwell, reported for the Reference Committee on Constitution and By-Laws.

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

The Reference Committee on Amendments to the Constitution and By-Laws met at 5:15 p.m. on March 19, 1961, in Room 4 of the Muehlebach Hotel. The following were present: Drs. W. D. English, Chairman, Stanley F. Hampton, William R. Richardson, James K. Ritterbusch and D. D. Stuart.

The following amendments were presented to the Committee for discussion and consideration:

1. Report of the Special Committee to Study the Councilor-District Set-Up, "This Special Committee, appointed by the President in compliance with a resolution adopted by the 1960 House of Delegates, makes the following recommendation: That St. Louis County be established as a separate Councilor District and that the Constitution be amended so that the number of Councilors be increased from 10 to 11."

The Committee approved this amendment unanimously and suggested this change in the Constitution: Change Article VII, Section 1 after . . . "and a Vice Speaker of the House of Delegates and ten councilors selected as provided for." to read, "and a Vice Speaker of the House of Delegates and eleven councilors selected as provided for."

Mr. Speaker, I move the adoption of this portion of the report.

Following second, this portion of the report was adopted by a vote of 56 to 43. The Speaker explained that the amendment would lie on the table for one year.

The supplemental report of the Committee on Constitution and By-laws was studied as follows:

WHEREAS, The Missouri Radiological Society was formed in 1960 in order to promote the science and art of Radiology in the practice of medicine, the protection of public health, and to disseminate information to physicians and members of the public, therefore be it

Resolved, That the Missouri State Medical Association be requested to amend its Constitution and By-Laws in order to establish a Committee on Radiology as a standing committee of the Association, and be it further

Resolved, That the By-Laws of the Missouri State Medical Association, Chapter VII, Section 2, be amended, following the words "A Committee on Aging" by adding the following: "A Committee on Radiology," and by adding to Section 2 of Chapter VII immediately prior to the beginning of Section 3 the following: "The Committee on Radiology shall consider matters concerned with radiology and shall disseminate information regarding the use of radiology to physicians and other interested groups in this state."

The Committee approved this amendment unanimously.

Mr. Speaker, I move the adoption of this portion of the report.

The Council met periodically throughout the year.

The motion was duly seconded.

An amendment to add "and radiation" was offered. Following discussion by Drs. James C. Cope, Columbia; Joseph C. Peden, St. Louis, and Gwilym S. Lodwick, Columbia, a substitute amendment was presented changing the wording to "and ionizing radiation," and on vote the amendment was adopted.

On vote the report of the Reference Committee, as amended, was adopted and the amendment to the By-Laws was laid on the table for a day.

Dr. William M. Kitchen, Kansas City, presented the report of the Reference Committee on Resolutions.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

The meeting of the Reference Committee on Resolutions of the Missouri State Medical Association was held at 5:00 p.m. on Sunday, March 19, 1961, in Room 363, Hotel Muehlebach, Kansas City, with the following members present: Drs. William M. Kitchen, Chairman, Roy A. Walther, Jr., James M. Macnish, Kenneth E. Knabb and Robert W. Smith.

The meeting was called to order by Wm. M. Kitchen. The first order of business was the reading of the following Resolution:

Whereas, The four county medical societies of Jackson, Clay, Wyandotte and Johnson have undertaken the sponsorship of the Greater Kansas City Health Fair, and

Whereas, This project has meant countless hours of effort and work on the part of the physician members of these societies, and

Whereas, The Greater Kansas City Health Fair brings to the citizens of the Kansas City metropolitan area an unsurpassed opportunity to see and benefit from an outstanding display of advances in the health care field, therefore be it

Resolved, That the House of Delegates of the Missouri State Medical Association sincerely commends these four county medical societies for their excellent work in developing and staging the fine Kansas City Health Fair.

Following reading of the foregoing resolution, it was suggested that the following be added to the Resolution: "*Be it further resolved*, that copies of this resolution be sent to the presidents of each of the four county medical societies."

Upon motion duly made and seconded, it was unanimously voted that the foregoing resolution be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

The next order of business was the reading of the following Resolution:

Whereas, Effective emergency medical care at the scene of accidents on streets and highways is known to be essential to the best interests of the injured, and

Whereas, Emergency medical care (splinting of fractures, arrest of hemorrhage, dressing of wounds, rendition of emergency oxygen, etc.) requires only trained ambulance personnel, adequate equipment on ambulances (this includes all casualty-carrying vehicles functioning as ambulances), and proper motivation of ambulance and law enforcement personnel towards effective emergency medical care, and

Whereas, Surveys under the direction of the National Safety Council have shown that emergency medical care is of the best quality where it is required by state statutes or municipal ordinances, and

Whereas, The State of Missouri has no such state statute, and few, if any, municipalities have such ordinances, even though several other states and municipalities apparently as a result thereof are said to have more effective emergency medical care, and

Whereas, It is common knowledge among members of the Missouri State Medical Association that few street and highway casualties have had little, if any, emergency medical care before arriving at a hospital, and

Whereas, The National Safety Council and the American College of Surgeons have established minimum requirements for training in first aid of ambulance and law enforcement personnel and minimum requirements for the equipment of ambulances, therefore be it

Resolved by the House of Delegates of the Missouri State Medical Association in their 1961 annual session at Kansas City, Missouri, that the State of Missouri should have a statute and the municipalities therein should have ordinances requiring adequate training of ambulance personnel, adequate equipment on ambulances, and adequate rendition of emergency medical care at the scene of accidents as recommended by the National Safety Council and the American College of Surgeons; and be it further

Resolved, That a copy of this resolution be forwarded to the Governor of Missouri and through the component societies of the MSMA to the mayors, city managers, and comparable municipal officials throughout the counties of the State of Missouri.

After a discussion led by Oscar Hampton, Speaker of the House, and upon motion duly made and seconded, it was unanimously voted that the foregoing resolution be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

The third order of business was the reading of the following Resolution:

Resolved, That the House of Delegates of the Missouri State Medical Association approve the compilation of a letter containing factual material and all of the latest data on old age health plans, and excerpts from the letter of Hon. Tom Curtis, U. S. congressman from 2nd district, St. Louis, Mo. and Hon. Durward Hall, 8th district of Springfield, Mo., citing facts regarding this problem that should be called to the attention of every citizen of this country, and be it further

Resolved, That the House of Delegates direct the Missouri State Medical Association Staff to reprint and disseminate such material to all members for use before service clubs and public meetings, thereby getting better than usual press releases; and be it further

Resolved, That the Missouri State Medical Association should propose to the American Medical Association that the A.M.A. carry on such a program to reach every member in the 50 United States. This information should include emphasis on the encouragement in homes, schools, unions and business organizations of a program of individual savings rather than a dependency on the Federal Government for total care and pensions.

After discussion led by Kenneth E. Knabb and participated in by Joseph C. Edwards, William M. Kitchen and Robert W. Smith, and upon motion duly made and seconded, it was unanimously voted that the foregoing resolution be adopted.

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

Mr. Speaker, I move the report as a whole be adopted.

Upon second, the report as a whole was adopted.

Dr. Joseph L. Fisher, St. Joseph, gave the report of the Reference Committee on Miscellaneous Affairs.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

The Reference Committee on Miscellaneous Affairs met at 3:30 p.m., March 19, and at 9:00 a.m. on March 20 and considered a resolution presented by Dr. Wommack, Stone County Delegate, regarding recommendations of the Council on the Committee on Medical Economics and Aging on implementation of the Kerr-Mills Law and recommends the adoption of the following substitute:

Whereas, The American Medical Association has requested vigorous action of every state medical association in implementing the provisions of the Kerr-Mills Law (including Medical Assistance for the Aged), and

Whereas, This requested action was reported to the Council of the Missouri State Medical Association and the Council approved the principle of the Kerr-Mills Bill and referred it to the Committees on Medical Economics and Aging for recommendations on implementation, and

Whereas, The recommendation of these Committees as approved by the Council was in essence, that "The Association support the (minimum) implementation of the Kerr-Mills Law specifically through encouraging the appropriation of sufficient additional state funds, which, with matching Federal money will enable the continuance of payments under the program to hospitals on the basis of their per diem costs," and

Whereas, This minimum implementation of Medical Assistance for the Aged represented the maximum compromise that could be agreed upon by the Committees studying this problem, and

Whereas, The endorsement of this position by the House of Delegates will for the first time place this Association on record as believing that a single provider of Health Care is entitled to full reimbursement by the Government for the care of the indigent before other providers in the health care program have been considered, and

Whereas, This action will not produce the results desired by the American Medical Association as outlined at the December 1960 A.M.A. meeting, therefore be it

Resolved, That the Reports of the Joint Committees on Medical Economics and Aging and the Committee on Aging, as approved by the Council, be *not* approved by this House of Delegates, and be it further

Resolved, That this House of Delegates approve the principle of the Kerr-Mills Bill and recommend to the Missouri Legislature that the provisions of this law be fully implemented in our state in the order of needs.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was duly seconded.

This was discussed or questioned by Drs. John P. Ferguson, Springfield; Edgar W. Davis, St. Louis; R. D. Dwyer, North Kansas City; Fred Wommack, Crane; Stanley S. Peterson, Springfield; A. P. Rowlette, Moberly; O. B. Barger, Harrisonville; Howard J. McAlhany, Springfield; James R. McVay, Kansas City; Paul C. Morton, Springfield.

Dr. David N. Kerr, St. Louis, moved that the resolution be referred back to the Reference Committee on Miscellaneous Affairs for further study.

The motion was duly seconded and on vote was passed.

The Committee also considered the resolution presented by Greene County Medical Society Delegates regarding Payment of Physicians Under Government Financed Medical Programs for the Indigent, as follows:

Whereas, The House of Delegates of the Missouri State Medical Association has gone on record as opposing the inclusion of physicians fees under the Vendor program in Missouri, and

Whereas, Services rendered by hospitals and other medical ancillary services are covered for payment under this and other government financed medical care programs for the indigent, and

Whereas, Physicians have always given their personal services to the needy, correlating their fees to suit the patient's ability to pay, and

Whereas, In December 1960 the House of Delegates of the American Medical Association "reaffirmed the physician's right to a reasonable fee for medical services, particularly home and office care, rendered to patients for whose care the governmnt has assumed financial responsibility, recognizing the profession's right to reduce or forego fees for these patients at its own discretion, through negotiation with welfare agencies, or in the interest of public economy of improvement of some other sector of the indigent care program," and

Whereas, Present cost estimates of the Vendor Program do not reflect true costs of medical care for these people because no physician fees are included, and

Whereas, Once physicians permit such programs to become formally established, estimates of the cost of medical care ignore the degree to which the medical profession subsidizes care for the needy, a degree not approached by any other professional group and certainly not by suppliers of the basic necessities of food, clothing and shelter, therefore, be it

Resolved, That we reaffirm our stand that the doctors of the State of Missouri will continue to provide physicians services for those without means, government or otherwise, and be it further

Resolved, That the House of Delegates of the Missouri State Medical Association go on record as requesting the inclusion of monetary allowances for physician services rendered to those who are covered by any level of government-financed medical care programs, including Vendor.

Mr. Speaker, I move the adoption of this portion of the report.

This was discussed by Drs. A. P. Rowlette, Moberly; Fred Wommack, Crane; Joseph C. Edwards, St. Louis; W. W. Tillman, Springfield; Robert B. Bassett, St. Louis; Thomas M. Macdonnell, Marshfield; George L. Hawkins, St. Louis; Paul T. Luckenbill, Platte City; James C. Cope, Columbia.

A roll call vote was called for, but on vote was voted down.

Dr. J. W. Thompson, St. Louis, moved that the resolution be referred back to the Reference Committee on Miscellaneous Affairs for further discussion and study. This was duly seconded and passed.

The Committee considered a resolution presented by the Greene County Medical Society delegates in regard to the Public Service program. No final decision was made at this time regarding that problem and it will be forthcoming in the subsequent report Wednesday morning.

The Committee also considered the following Resolution on Social Security Health Care Proposals:

Whereas, S. 909 and H. R. 4222, known as the Anderson-King Bills, have been introduced in the Congress to implement the Administration proposals, including the provision for administration under the Social Security system, and similar bills may be proposed, and

Whereas, Any program for health care of the aged or other groups in our nation which uses the Social Security system for administration, operation or taxation is bound to result in poorer quality medical care for the people at greatly increased costs, and

Whereas, Available voluntary and private means of providing health care programs for our citizens are vastly superior to the Federal programs proposed on a compulsory basis, therefore be it

Resolved, That the physicians of Missouri, through the House of Delegates of the Missouri State Medical Association, hereby register their opposition to the proposals to provide Federal health care programs through the Social Security system for any groups of the people, and, be it further

Resolved, That copies of this resolution be sent to the President of the United States and the Members of the Congress from Missouri.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote the resolution was adopted.

The Committee considered the President's Message and approved it.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote the President's Message was approved.

The Report of the Special Committee on Corporate Practice was also considered by the Reference Committee on Miscellaneous Affairs and it was unanimously approved by the Committee.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote the report was approved.

The Reports of the Committees on Physical Medicine and Rehabilitation, Public Policy and Public Relations and Industrial Health were also unanimously approved by the Reference Committee on Miscellaneous Affairs.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote the reports were approved.

The Report of the Council on the Missouri State Medical Association Student Loan Fund was considered and approved with the following recommendation: that Item No. 4, under General Conditions, "Proceeds of the loan will be paid to the student for disbursement" be changed as follows: "Funds provided by the loan will be paid to the student for disbursement."

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this was approved.

The minutes of the Council from the September 24, 25 and December 10, 11, 1960 meetings, relative to federal legislation, state legislation, "Care of the Needy" and "Care of the Near Needy" were considered and approved by the Reference Committee on Miscellaneous Affairs, as printed on pages 35, 36, 37 and 65 in the booklet, "Reports of Officers and Committees to the House of Delegates."

Mr. Speaker, we recommend the adoption of these reports.

The motion was seconded and on vote was accepted.

The minutes of the Council of January 21, 22, 1961, as published in Missouri Medicine, the Journal of MSMA, and the Handbook, dealing with the Public Service Program, were considered and approved.

Mr. Speaker, We recommend the adoption of this portion of the report.

The motion was seconded and on vote was passed.

The Report of the Committee on Mental Health, as published in the "Reports of Officers and Committees" was considered and approved. The Committee wishes to emphasize to the House the recommendations of the Council that the Committee on Mental Health carefully examine the finally drafted legislation to the end that patients be referred to community mental health clinics only on referral of physicians.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote was approved.

Reference committees met following the session of the House.

The Report of the Committee on Medical Economics was studied and found to have several discrepancies with some of the figures reversed thereby confusing the expenditures by Blue Cross and Blue Shield. It is suggested this report be referred back to the Committee on Medical Economics for proper labeling and clarification.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote was passed.

Mr. Speaker, I move the adoption of the report "In Toto" thus far.

The motion was seconded and on vote was passed.

Dr. Doyle C. McCraw, Bolivar, gave the report of the Reference Committee on Medical Education and Public Welfare.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

The Reference Committee on Medical Education and Public Welfare met at 4:40 p.m., March 19, 1961, with all members present.

It is recommended that the published reports of the following standing and special committees be adopted: Anesthesiology, Scientific and Postgraduate Work, Cancer, Publication, Maternal Welfare, Medical Education and Hospitals, Health and Public Instruction, Trauma, Eye Health, Laboratory Medicine, Diabetes, Control of Venereal Disease, Civil Defense Disaster Medical Care, Study of Cardiac Disease, Rural Medical Service, American Medical Education Foundation and Infant and Child Care.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The following resolution introduced by the Jackson County delegation was studied:

WHEREAS, The proper scientific study of many illnesses requires a compilation of many cases from individual records and

WHEREAS, Such compilations are often made difficult by the threat of records being used for other purposes, such as evidence in malpractice suits and

WHEREAS, In an effort to encourage scientific studies, many state legislatures (Ohio, Minnesota, California, South Dakota, Massachusetts) have passed confidentiality statutes designed to prevent other uses of such records, therefore be it

Resolved, That the House of Delegates recommend to Council of the Missouri State Medical Association that they

(1) Formulate a confidentiality statute to encourage scientific studies that have as their purpose the reduction of morbidity and mortality in the State of Missouri and

(2) Take appropriate steps to see that such a law is introduced into the Legislature as soon as possible and

(3) Actively support the passage of such legislation.

The Committee approved this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The next resolution was introduced by the Committee on Laboratory Medicine, as follows:

WHEREAS, The continuing Education Division of the Kansas City University School of Law is sponsoring a Law-Medicine Institute on May 19 and 20 designed to instruct physicians and lawyers and law enforcement officers in methods of investigating death under obscure, unknown or suspicious circumstances, and

WHEREAS, This program emphasizes the application of medical science to the administration of justice, and

WHEREAS, Programs of this nature are likely to impress the public and legislators alike with the need for modern medicolegal investigative offices, thereby facilitating the enactment of legislation necessary to establish such offices, now therefore be it

Resolved, That the Missouri State Medical Association cooperate with the sponsors of this program to the extent that printed programs and other literature relating to the meeting be permitted to state "in cooperation with the Missouri State Medical Association."

The Committee approved this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of was approved.

On motion, duly seconded, the report as a whole was approved.

Dr. Walter Baumgarten, St. Louis, gave the report of the Reference Committee on Reports of Officers.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS

The Reference Committee on Reports of Officers met in Room 362 at Hotel Muehlebach at 4:15 p.m., March 19, 1961. All members were present.

The address of the President-Elect, Dr. J. H. Summers, was unanimously approved.

The reports of the Secretary and Treasurer were approved as published. The budget for the year 1961, totaling $194,337.00, was also approved.

The report of the Council as published, except those portions assigned to the Reference Committee on Miscellaneous Affairs, and including that portion of the supplemental report given by Dr. Dowell offering the resolution concerning traffic safety was approved.

The Committee wishes to thank the Woman's Auxiliary for their energy in developing a pilot study of local health facilities for indigent care.

The reports of the Executive Secretary and the Committee on Defense were approved as published.

Mr. Speaker, I move the adoption of this report.

The motion was seconded and on vote the report was adopted.

Dr. M. Pinson Neal, Columbia, gave the report of the Reference Committee on Necrology.

REPORT OF THE REFERENCE COMMITTEE ON NECROLOGY

The House of Delegates to the Missouri State Medical Association at this Annual Meeting wishes to formally express deep sorrow and pay tribute to the memory of our 66 colleagues who passed away during the past Association year.

With signal credit, great honor and distinction, those comrades served their country, their state, their respective cities and communities and helped to bring Missouri and American medicine to the high standard now enjoyed.

A panel on leukemia was a part of the program.

Mindful of their associations, fellowship and manifold services and gratefully acknowledging our appreciation, be it

Resolved, That in the minutes of this House of Delegates covering the 103rd Annual Session we record and express our deep personal sorrow for the loss of our fellow members.

Mr. Speaker, I move the adoption of this report and move that the members of the House of Delegates stand in respectful memory for one moment. The members stood and an affirmative vote was taken on the motion.

Members Deceased Since the 1960 Session

Reser, Thomas S., M.D., Cole Camp
Hull, Walter S., M.D., Faucett
Miller, Wade H., M.D., Kansas City
Pullen, Roscoe L., M.D., Princeton, Ill.
Kane, R. Emmett, M.D., St. Louis
Frank, Adolph, M.D., St. Louis
Lemire, Robert W., M.D., Sedalia
Walthall, Damon O., M.D., Kansas City
Hitchcock, Waldo P., M.D., Columbia
Koon, Bernard T., M.D., St. Louis
Kibbe, John Halbert, M.D., Monroe City
Thompson, Ralph L., M.D., St. Louis

Davis, Harry H., M.D., Rolla
Lawrence, John V., M.D., St. Louis
James, Edward Dean, M.D., Joplin
Heimburger, Leroy F., M.D., Springfield
Baron, William, M.D., St. Louis
Gay, Lee Pettit, M.D., Jefferson City
Patton, Leslie E., M.D., St. Louis
Roden J. S., M.D., Columbia
Sweaney, Isaac F., M.D., Oregon
Keith, Willis E., M.D., Kansas City
Kouri, Martin F., M.D., St. Louis
Patterson, William R., M.D., Warrensburg
Hewitt, Walter R., M.D., University City
Burns, Stanley S., M.D., St. Louis
Holliday, Morgan L., M.D., Fillmore
Taylor, Byron H., M.D., Fredericktown
White, William H., Sr., M.D., Clayton
McPheeters, James W., Jr., M.D., Poplar Bluff
Humberd, Charles D., M.D., Barnard
Sinkler, William H., M.D., St. Louis
Sassin, Edmond F., M.D., St. Louis
Morrow, Raymond L., M.D., Kansas City
Montgomery, J. S., M.D., Milan
Hawkins, George W., M.D., Salisbury
Zimmermann, Carl A. W., M.D., Cape Girardeau
Cassidy, Leslie D., M.D., St. Louis
Flynn, Joseph E., M.D., Columbia
Stahl, Phineas D., M.D., St. Louis
Levine, Ervan L., M.D., Vandalia
Ploehn, Emma, M.D., St. Louis
Allen, W. H., Jr., M.D., Hume
Johnson, Glenn D., M.D., Maysville
Liersch, Joseph C., M.D., Kansas City
Walker, William E., M.D., LaMonte
Meiners, Edwin P., M.D., St. Louis
Byrd, Homer E., M.D., Carthage
St. John, Dewey, M.D., St. Louis
Mitchell, Ernest, M.D., Baytown, Texas
Simmons, Benjamin B., M.D., Orrick
Mason, Roy, M.D., University City
Drum, Clarence G., M.D., St. Louis
Jenkins, Joseph M., M.D., St. Charles
Buehrer, Cletus E., M.D., Lawson
Dooley, Thomas A., M.D., St. Louis
Gallagher, John F., M.D., St. Louis
Russell, James M., M.D., Monett
Wimber, Thomas C., M.D., St. Louis
Thompson, Arthur M., M.D., St. Louis
Simmons, Leroy, M.D., Sarcoxie
O'Connell, John, M.D., St. Louis
Zoglin, Nathan, M.D., Kansas City
McMurtry, Leonard K., M.D., Moberly
Powell, Rudolph V., M.D., St. Louis
Klein, Harry A., M.D., St. Louis

NEW BUSINESS

Don C. Weir, M.D., St. Louis: I would like to present a resolution.

Whereas, The Legislature of the State of Missouri has in recent years recognized the importance and the seriousness of the problem of mental health in our state and has provided funds to make possible marked progress in this area, and

Whereas, There still remains a great need for further progress and further investment by Missouri in the mental health of its citizens, and

Whereas, This need has been spelled out in a 10-year program proposed by the Division of Mental Diseases, and

Whereas, The implementation of this program will require not only substantial appropriations of funds by the Legislature, but also the training and recruiting of personnel competent in psychiatry and its ancillary disciplines, now therefore be it

Resolved, That the House of Delegates of the Missouri State Medical Association request the legislature to move as far and as speedily as possible to provide the funds required for implementation of the 10-year program of the Division of Mental Diseases and also to enact such enabling legislation as may appear necessary for the full attainment of the goals of the program, and be it further

Resolved, That copies of this resolution be forwarded to the President Pro Tempore of the Senate and the Speaker of the House of Representatives and that a copy also be sent to the Governor of the State of Missouri.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

Dillard M. Eubank, M.D., Kansas City: I would like to present a resolution for the Jackson County delegation.

Whereas, The Public Service Program enacted by the 1960 MSMA House of Delegates was a state-wide effort designed to achieve better public relations, but was found by the Council to be difficult to administer during the past year, and

Whereas, Such public relations are, at the present time, dependent to a considerable extent upon the attitude of the medical profession toward the growing problem of geriatric medicine, and

Whereas, Since the last meeting of the MSMA House of Delegates in March 1960, Congress enacted Public Law 86-788 (Kerr-Mills Law), and

Whereas, The AMA has officially supported the implementation of the Kerr-Mills bill as an alternative to Forand type of legislation, and

Whereas, The Jackson County Delegation has recommended support of Greene County resolutions designed to implement the Kerr-Mills bill in the State of Missouri, and

Whereas, The Jackson County Delegation feels that such legislation will provide adequate care for the elderly and indigent if implemented by the State of Missouri, therefore be it

Resolved, That the Public Service Program designed to improve the public relations of the medical profession be continued, but that the program be modified to utilize the full effectiveness of the entire Missouri medical profession on a community and individual level, and be it further

Resolved, That the Officers and Council of the Missouri State Medical Association and the headquarters office be charged with the responsibility of securing adequate and competent personnel in order to bring to the attention of each doctor personally the great importance of their active participation in the fight against socialized medicine by means of active support of full implementation of the Kerr-Mills Bill by the Missouri Legislature.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

David N. Kerr, M.D., St. Louis: I would like to present a resolution.

Whereas, The chief concern of the MSMA is with the welfare of its members, and

Whereas, Recent trends among some hospital administrators shows a tendency to put the hospitals in the position of leadership in the field of general health care, a traditional role of the practicing physician, and

Whereas, The National Hospital Accreditation Boards do not take this aspect of the Hospital program into account, and

Whereas, This type of operation would seem to fall within the limit of corporate practice of medicine, therefore be it

Resolved, That the present committee of the MSMA, charged with studying the question of corporate practice of medicine, be instructed also to study the trend and, be it further

Resolved, That the committee study the feasibility of a State Accreditation Board under the direction of the MSMA, to accredit hospitals in light of this aspect, as well as the general adequacy of the individual hospitals in the State of Missouri, and to license Hospital Administrators within the State.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Robert S. Kingsland, M.D., Clayton: I wish to present a resolution for the St. Louis County Medical Society.

Whereas, It is a medically recognized fact that excessive speed of ambulances and other casualty carrying vehicles is not essential to saving of lives of the patients being so transported, and

Whereas, It is known that ambulances are repeatedly traveling at excessive speed and otherwise are violating state and municipal traffic regulations regarding speed and safety for ordinary traffic, and

Whereas, It is well known to the medical profession that excessive speed of ambulances not only endangers the life of the transported patient, and ambulance attendants but the lives of occupants of other vehicles, therefore be it

Resolved, That the MSMA urge the enactment of state statutes and municipal ordinances controlling the speed and operation of ambulances and other casualty carrying vehicles so as to guarantee their compliance with local regulations governing ordinary traffic, and be it further

Resolved, That a copy of this resolution be forwarded to the Governor of Missouri and through the component societies of the MSMA to the mayors, city managers, and comparable municipal officials throughout the counties of the State of Missouri.

The Speaker referred this resolution to the Reference Committee on Resolutions.

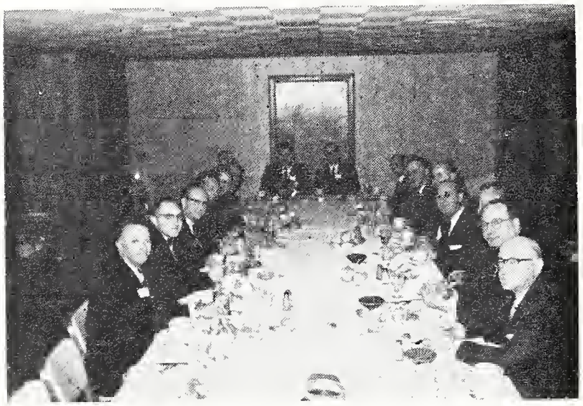
R. D. DWYER, M.D., North Kansas City: I wish to present a resolution.

WHEREAS, Mental health is very important to all of us, and

WHEREAS, Mental health is as much within the scope and province of medicine as is physical health—there being an impossibility to separate them in cause and effect, and

WHEREAS, The mental health of our citizens is becoming more and more propagandized through a so-called mental health movement which chief aim is to stereotype mental illness, thus making anyone who deviates from this stereotype which they present as the ideal normal, and who intend to do this through questionnaire, and who have not as their wish the desire to care for the sick and the helpless but rather merely want to gain power, now be it therefore

Resolved, That the MSMA go on record as being only in favor of those mental health programs which are fostered and carried on by truly scientific organizations which are in the hands of competent medical doctors and not pseudo-scientific psychological organizations.


The Missouri Radiology Society held a dinner meeting.

The Speaker referred this resolution to the Reference Committee on Miscellaneous Affairs.

R. D. DWYER, M.D., North Kansas City: I have another resolution to present.

WHEREAS, The medical profession believes a strong immunization program started at an early age in life is essential to the control and irradication of certain communicable diseases, and

WHEREAS, There are a great number of our youth who reach school age without this protection, be it

Resolved, That the MSMA go on record as favoring such legislation on immunization as proposed by the Junior Chamber of Commerce but with modifications as brought out in the analysis by the MSMA legal council, and be it further

Resolved, That it be emphatically urged that the private practice of medicine be the proper agency to carry out this program using the state only for education and enforcement, and be it further

Resolved, That emphasis be made of the fact that any child, whose parents or guardians cannot afford such immunizations shots, would receive them free or for what they could afford by any private practitioner of medicine whose practice included the dispensing of such shots.

The Speaker referred this resolution to the Reference Committee on Resolutions.

R. D. DWYER, M.D., North Kansas City: I have another resolution to present.

WHEREAS, We as physicians are interested in having our prescriptions compounded with extreme accuracy and have relied on our allied profession of pharmacy through its skill and dedication to do this, and

WHEREAS, We are dependent on this being continued by a steady number of our youth being attracted into this para medical field, and

WHEREAS, We are cognizant of practices being carried on in this state whereby our prescriptions are being compounded by untrained personnel which tends to threaten the accuracy of our prescriptions and discourage possible candidates from entering this field because of such abuses, therefore be it

Resolved, That the MSMA go on record as approving the proposed changing of Section 338.010 of the pharmacy code so that only licensed pharmacists be allowed to dispense or sell any prescription item drug, and be it further

Resolved, That the only helper or assistant that be allowed in this highly skilled task be pharmacy students in their final two years of study at a school of pharmacy with requirements for graduation which are approved by the board of pharmacy and that they be under the direct supervision of a licensed pharmacist.

The Speaker referred this resolution to the Reference Committee on Resolutions.

JOSEPH C. EDWARDS, M.D., St. Louis: I wish to present a resolution.

WHEREAS, It is recognized among the medical profession that the physicians of this state are already making a substantial contribution to many communities by their care of people without means who need care, and

WHEREAS, The exact cost of this medical care, were such patients charged for such care, and the considerable time and effort expended by physicians is not generally known publicly, therefore be it

Resolved, That the House of Delegates of MSMA authorize and direct the MSMA to make a poll of its membership and compile statistics on the amount of care given without charge and that such information be sent to the State Legislature and encourage its publicity to the news media of the state.

The Speaker referred this resolution to the Reference Committee on Resolutions.

CHARLES B. WHEELER, M.D., Kansas City: The Jackson County delegation wishes to present a resolution.

WHEREAS, The Honorable Oscar Hampton, M.D., has rendered three years of outstanding service as Speaker of the House of Delegates of the Missouri State Medical Association, therefore be it

Resolved, That the present House of Delegates formally commend said Oscar Hampton for his consistently excellent performance of the Speaker's duties during the years 1959, 1960 and 1961.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Announcement of reference committee meetings were made and the House of Delegates adjourned at 6:20 p.m.

Wednesday, March 22, 1961

The House of Delegates was called to order by the Speaker, Oscar P. Hampton, M.D., University City, at 8:00 a.m., Wednesday, March 22, following breakfast in the Colonial Ball Room, Hotel Muehlebach, Kansas City.

John F. Bowser, M.D., Kansas City, reported for the Committee on Credentials.

John I. Matthews, M.D., Jefferson City, Secretary, read the minutes of the Sunday and Monday meetings of the House of Delegates.

On motion, duly seconded, these were adopted.

The Secretary announced the following reports of election of Councilors: Second District, Avery P. Rowlette, M.D., Moberly; Fourth District, Paul R. Whitener, M.D., St. Louis, reelected; Sixth District, O. B. Barger, M.D., Harrisonville, reelected; Eighth District, Doyle C. McCraw, M.D., Bolivar; Tenth District, W. D. English, M.D., Cardwell. E. A. Stricker, M.D., St. James, Ninth District, was elected for a one year term to complete a two year term following his appointment by the Council to fill the unexpired term of J. H. Summers, M.D., Lebanon, who resigned in 1960 when he was elected President-Elect. (The Council later appointed Joseph L. Fisher, M.D., St. Joseph, to fill the unexpired term as Councilor of the First District.)

Don C. Weir, M.D., St. Louis, presented the report of the Committee on Nominations.

REPORT OF THE NOMINATING COMMITTEE

For Vice Presidents: Claude W. Cooper, M.D., Thayer; Benjamin N. Jolly, M.D., Mexico; David N. Kerr, M.D., St. Louis.

There being no nominations from the floor, on motion, duly seconded, these officers were declared elected.

For Delegates to the American Medical Association: A. W. Neilson, M.D., St. Louis, alternate, Robert Kelley, M.D., St. Louis; Richard H. Kiene, M.D., Kansas City, alternate, Rolla B. Wray, M.D., Nevada.

There being no nominations from the floor, on motion, duly seconded, these officers were declared elected.

For Speaker of the House of Delegates, William C. Mixson, M.D., Kansas City; Vice Speaker, Stanley S. Peterson, M.D., Springfield.

There being no nominations from the floor, on motion, duly seconded, these officers were elected.

ROBERT W. SMITH, M.D., Marceline: Mr. Speaker, I take great pleasure in nominating for President-Elect a man whom we all know and respect. This man is a native Missourian and is the son of a doctor who practiced in Missouri. He is a graduate of Washington University and is a Fellow of the International College of Surgeons. This man has served diligently on the Council for the last fifteen years. He was the instigator in the formation of the Grand River Medical Society which comprises nine counties. This man has served quite actively in civic affairs and in community affairs and his church. I take great pleasure in nominating Dr. Donald M. Dowell, who is Chairman of the Council and is Councilor of the First Councilor District.

The scientific program was opened with refresher courses.

G. W. WINN, M.D., Boonville: This is one of the few issues before the House about which there need not be confusion. I take great pleasure in seconding the nomination of Dr. Donald M. Dowell.

There being no other nominations, on motion, duly seconded, Dr. Dowell was elected President-Elect by acclamation.

DONALD M. DOWELL, M.D., Chillicothe: Gentlemen, Mr. Speaker, this is indeed a wonderful honor you have given me. I certainly think that I am under no false impressions as to the seriousness of this, as to the problems that we have to face in the next year or two inasmuch as I have been a member of the House of Delegates, as a delegate or councilor, for several years. I promise you faithfully that I will do my very best, and thank you very much.

Dr. William M. Kitchen, Kansas City, gave the report of the Reference Committee on Resolutions.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

The meeting of the Reference Committee on Resolutions was held at 8:30 a.m., Tuesday, March 21, in Room 364, with the following members present: Drs. William M. Kitchen, Roy A. Walther, Jr., James N. Macnish, Kenneth E. Knabb and Robert W. Smith.

The first order of business was the following resolution:

WHEREAS, It is recognized among the medical profession that the physicians of this state are already making a substantial contribution to many communities by their care of people without means who need care, and

WHEREAS, The exact cost of this medical care, were such patients charged for such care, and the considerable time and effort expended by physicians is not generally known publicly, therefore be it

Resolved, That the House of Delegates of MSMA authorize and direct the MSMA to make a poll of its membership and compile statistics from office and hospital practice on a yearly basis on the amount of care given without charge and that such information be sent to the State Legislature and encourage its publicity to the news media of the state.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote was adopted.

The next order of business was the reading of the following resolution:

WHEREAS, It is a medically recognized fact that excessive speed of ambulances and other casualty carrying vehicles is not essential to saving lives of the patients being so transported, and

WHEREAS, It is known that ambulances are repeatedly traveling at excessive speed and otherwise are violating state and municipal traffic regulations regarding speed and safety for ordinary traffic, and

WHEREAS, It is well known to the medical profession that excessive speed of ambulances not only endangers the life of the transported patient, and ambulance attendants, but the lives of occupants of other vehicles, therefore be it

Resolved, That the MSMA urge the enactment of state statutes and municipal ordinances controlling the speed and operation of ambulances and other casualty carrying vehicles so as to guarantee their compliance with local regulations governing ordinary traffic, and be it further

Resolved, That a copy of this resolution be forwarded to the Governor of Missouri and through the component societies of the MSMA to the mayors, city managers, and comparable municipal officials throughout the counties of the State of Missouri.

A general discussion by the committee members and the other doctors present followed the reading of the foregoing resolution. It was agreed to amend the first paragraph of this resolution by adding the word "probably" between the words "is" and "not," thereby making the first paragraph of the foregoing resolution read as follows:

WHEREAS, It is a medically recognized fact that excessive speed of ambulances and other casualty carrying vehicles is probably not essential to saving lives of the patients being so transported, and . . .

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The Committee considered a resolution offered by Dr. David N. Kerr, St. Louis, and presents the following resolution as a substitute:

WHEREAS, The chief concern of the MSMA is with the welfare of its members, and
WHEREAS, Recent trends among some hospital administrators shows a tendency to put the hospitals in the position of leadership in the field of general health care, a traditional role of the practicing physician, and
WHEREAS, The National Hospital Accreditation Boards do not take this aspect of the Hospital program into account, and
WHEREAS, This type of operation would seem to fall within the limit of corporate practice of medicine, therefore be it
Resolved, That the present committee of the MSMA, charged with studying the question of corporate practice of medicine, be instructed also to study the trend, and be it further
Resolved, That the committee study the feasibility of a State Accreditation Board under the direction of the MSMA, to accredit hospitals in light of this aspect, as well as the general adequacy of the individual hospitals in the State of Missouri, and be it further
Resolved, That if such Accreditation Board is deemed feasible, our delegates to the National AMA House of Delegates be instructed to inform that body and the Joint Accreditation Board, of its existence and duties, and request the Joint Accreditation Board to work in conjunction with the Missouri Accreditation Board.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The fourth order of business was the reading of the following resolution:

WHEREAS, The Honorable Oscar P. Hampton, Jr., M.D., has rendered three years of outstanding service as Speaker of the House of Delegates of the Missouri State Medical Association, therefore be it
Resolved, That the present House of Delegates formally commend said Oscar Hampton for his consistently excellent performance of the Speaker's duties during the years 1959, 1960 and 1961.

A short and favorable discussion followed the reading of this resolution.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The fifth order of business was the reading of the following resolution:

WHEREAS, We as physicians are interested in having our prescriptions compounded with extreme accuracy and have relied on our allied profession of pharmacy through its skill and dedication to do this, and
WHEREAS, We are dependent on this being continued by a steady number of our youth being attracted into this para medical field, and
WHEREAS, We are cognizant of practices being carried on in this state whereby our prescriptions are being compounded by untrained personnel which tends to threaten the accuracy of our prescriptions and discourage possible candidates from entering this field because of such abuses, therefore be it
Resolved, That the MSMA go on record as approving the proposed changing of Section 338.010 of the pharmacy code so that only licensed pharmacists be allowed to dispense or sell any prescription item drug, and be it further
Resolved, That the only helper or assistant that be allowed in this highly skilled task be pharmacy students in their final two years of study at a school of pharmacy with requirements for graduation which are approved by the board of pharmacy and that they be under the direct supervision of a licensed pharmacist.

This resolution concerning prescriptions and pharmacists was discussed in lengthy detail by all persons present. It was the feeling of the Committee that we had insufficient material available to allow expression of an

BRINGS RESULTS SOONER AND MORE EFFICIENTLY
IN MANY CASES OF
acne
keratolyzes cornified follicle openings
...relieves excessively dry, scaly skin in chronic eczema

opinion either for or against such action at this time, and the Committee recommends that this resolution be referred by the President to an appropriate committee for study during the year.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The sixth order of business was the reading of the following resolution:

WHEREAS, The medical profession believes a strong immunization program started at an early age in life is essential to the control and eradication of certain communicable diseases, and

WHEREAS, There are a great number of our youth who reach school age without this protection, be it

Resolved, That the MSMA go on record as favoring such legislation on immunization as proposed by the Junior Chamber of Commerce but with modifications as brought out in the analysis by the MSMA legal council, and be it further

Resolved, That it be emphatically urged that the private practice of medicine be the proper agency to carry out this program using the state only for education and enforcement, be it further

Resolved, That emphasis be made of the fact that any child, whose parents or guardians cannot afford such immunization would receive them free or for what they could afford by any private practitioner of medicine whose practice included the dispensing of such immunizations.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

On motion, duly seconded, the report as a whole was adopted.

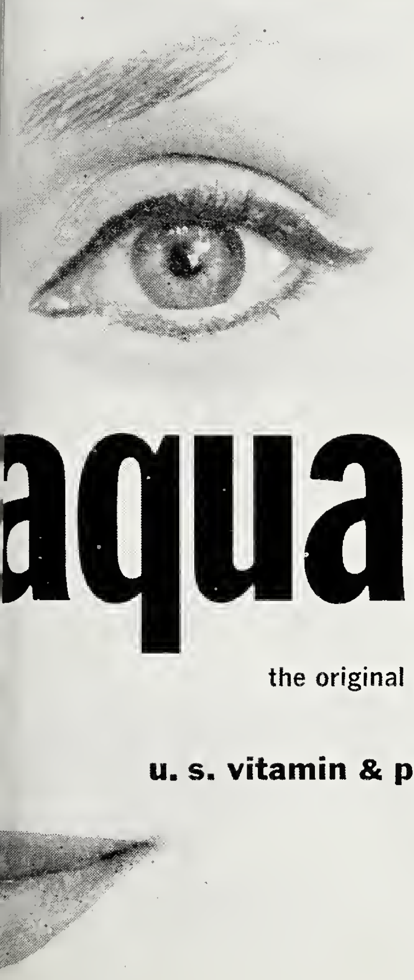
Dr. Joseph L. Fisher, St. Joseph, reported for the Reference Committee on Miscellaneous Affairs.

Reference committees went into executive sessions after open meetings.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

The Reference Committee on Miscellaneous Affairs met in Room T22, Hotel Muehlebach, Kansas City, Tuesday, March 21, 1961, at 8:00 a.m., with all members of the Committee present. About 35 advocates attended the meeting, most of whom spoke to the questions under consideration.

The Reference Committee on Miscellaneous Affairs considered the resolution submitted by the Stone County Delegate relating to recommendations of the Council and the Committee on Medical Economics and Aging rela-



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tive to implementation of the Kerr-Mills law, and the resolution introduced by the Greene County Medical Society regarding payment of physicians under Government financed medical programs for the indigent.

It is the Committee's considered opinion that the purposes of the two above mentioned resolutions will be served by the adoption of the report which follows.

Your reference committee recommends that the Report of the Committee on Aging and the Recommendations of the Joint Committee on Medical Economics and Aging be accepted, with the following deletions and changes:

1. Page 38, paragraph 2, under "Purpose," in the Report of the Committee on Aging, delete the sentence which reads as follows: "It was also brought out that the MSMA House of Delegates had opposed the acceptance of any payments by physicians under the vendor program and that only the House of Delegates could change that phase."

2. Page 40, under the Report of the Committee on Aging, paragraph 1, subtitle, "Action," delete the entire paragraph which reads as follows: "On motion of Dr. Peterson, duly seconded, it was voted that the staff be asked to prepare recommendations embracing the minimum requirements of the law, unless study finds these to be inadequate, making clear that physicians are not to be paid, that it is recognized that the law is socialistic but also is a compromise and that the problem is not as great as it is made out to be but is worthy for those few to whom it does apply."

3. Page 40, Recommendations of the Joint Committee on Medical Economics and Aging, delete the entire paragraph 3, which reads as follows: "At the same time, the Committees recommend that the Association continue the policy enunciated in 1958 by the House of Delegates—that physicians not receive Government funds as payment under the so-called 'vendor' program for medical care of the indigent—and that this policy be extended to apply to the implementation of 1960 Kerr-Mills law in Missouri."

4. Pages 41 and 42, delete the final paragraph under the Recommendations of the Joint Committee on Medical Economics and Aging which reads as follows: "With consideration of these and other factors, in view of the need of hospitals to recover their expenses of providing care for patients, and with consideration of the magnitude of the appropriation needed, the Committees therefore recommend that the Association support the implementation of the Kerr-Mills law specifically through encouraging the appropriation of sufficient additional state funds, which, with matching Federal money, will enable the continuance of payments under the program to hospitals on the basis of their per diem costs." And insert in lieu thereof the following:

"With consideration of these deletions and other factors, adoption of the following resolution is recommended:

"*Be It Resolved,* That the House of Delegates endorse the principles of the Kerr-Mills act and recommend that the act be fully implemented by the Legislature of Missouri to such degree as may appear necessary and in the order of need."

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote was passed with one dissenting vote. (A minority report was prepared by the dissenting voter and sent to the Editor of MISSOURI MEDICINE following the Annual Session. It appears on page 738.)

The Reference Committee on Miscellaneous Affairs has considered the resolution presented by the Greene County Medical Society regarding the Public Service Program and submits the following resolution:

WHEREAS, At the 1960 Annual Session of the Missouri State Medical Association the Greene County Delegates presented a resolution calling for the implementation of an intensive program of public relations emphasizing the positive programs of the medical profession, and

WHEREAS, Specific, concrete, positive programs were entered into partly as a result of the resolution from the House, such as the publicity, program materials, indigent care studies, directory of health resources and student loan fund programs as are outlined in the Council's Report, and

WHEREAS, Specific requests have been made of the House of Delegates by the Council as outlined in the last paragraph of the report, therefore, be it

Resolved, That the Council be clearly instructed by this House of Delegates that the membership of this Association does regard it as the task of organized medicine in Missouri to emphasize local (county and state) responsibility for medical care of those who cannot afford such care for themselves and it is not our belief that a negative defeatist attitude is justified because the "trend has gone so far," and, be it further

Resolved, That the Council be informed that this House of Delegates believes that practical, positive results were achieved through increased news releases on the programs of the Association, through presentation of program materials and AMA pamphlets to local societies, and the other programs outlined in the report and that this program "was headed practically speaking in the right direction" and that real, tangible, good can be accomplished by "this program (and others) like it," and be it further

Resolved, That the Council be instructed and reminded that there are many programs which were entered into this past year requiring little cash outlay but which resulted in much favorable publicity (i.e., news releases on honors medical student award, the preceptor programs, etc.) and that at a minimum, "individual doctors" must "afford the time" and "give the interest and the effort on which the success of such programs must ultimately depend," and furthermore, be it

Resolved, That the House of Delegates recommend to the Council, the Officers of the State Association, and to appropriate committees that great thought and care be exercised in any use of the word "guarantee" as used in connection with any of the programs under consideration.

Some moments were found for visiting.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The Reference Committee on Miscellaneous Affairs considered the following resolution presented by Clay County:

WHEREAS, Mental Health is very important to all of us, and

WHEREAS, Mental Health is as much within the scope and province of medicine as is physical health—there being an impossibility to separate them in cause and effect, and

WHEREAS, The mental health of our citizens is becoming more and more propagandized through a so-called mental health movement which chief aim is to stereotype mental illness, thus making anyone who deviates from this stereotype which they present as the ideal normal, and who intend to do this through question-

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therapeutic hours

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Supplied: Capsules, each containing Panmycin* Phosphate (tetracycline phosphate complex), equivalent to 250 mg. tetracycline hydrochloride, and 125 mg. Albamycin,* as novobiocin sodium, in bottles of 16 and 100.
Usual Adult Dosage: 1 or 2 capsules 3 or 4 times a day.
Side Effects: Panmycin Phosphate has a very low order of toxicity comparable to that of the other tetracyclines and is well tolerated clinically. Side reactions to therapeutic use in patients are infrequent and consist principally of mild nausea and abdominal cramps.
Albamycin also has a relatively low order of toxicity. In a certain few patients, a yellow pigment has been found in the plasma. This pigment, apparently, a metabolic by-product of the drug, is not necessarily associated with abnormal liver function tests or liver enlargement. Urticaria and maculopapular dermatitis, a few cases of leukopenia and agranulocytosis have been reported in patients treated with Albamycin. Most of these side effects usually disappear upon discontinuance of the drug.
Caution: Since the use of any antibiotic may result in overgrowth of nonsusceptible organisms, constant observation of the patient is essential. If new infections appear during therapy, appropriate measures should be taken.
Total and differential blood counts should be made routinely during prolonged administration of Albamycin. The possibility of liver damage should be considered if a yellow pigment, a metabolic by-product of Albamycin, appears in the plasma. Panalba should be discontinued if allergic reactions that are not readily controlled by antihistaminic agents develop.

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naire, and who have not as their wish the desire to care for the sick and the helpless but rather merely want to gain power, now, be it therefore

Resolved, That the MSMA go on record as being only in favor of those mental health programs which are fostered and carried on by truly scientific organizations which are in the hands of competent medical doctors and not pseudo-scientific psychological organizations.

The Committee recommends that the House of Delegates take no action on this resolution at this time, and further recommends that it be referred by this House of Delegates to the Standing Committee on Mental Health.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

One panel discussed "Exfoliative Cytology."

The Reference Committee on Miscellaneous Affairs considered a resolution submitted by a member of the St. Louis Medical Society in regard to the 10-year Mental Health Program. The Committee wishes to submit the following resolution, as amended:

Whereas, The Legislature of the State of Missouri has in recent years recognized the importance and the seriousness of the problem of mental health in our state and has provided funds to make possible marked progress in this area, and

Whereas, There still remains a great need for further progress and further investment by Missouri in the mental health of its citizens, and

Whereas, This need has been spelled out by a program proposed by the Division of Mental Diseases, and

Whereas, The implementation of this program will require not only substantial appropriations of funds by the Legislature, but also the training and recruiting of personnel competent in psychiatry and its ancillary disciplines, now, therefore, be it

Resolved, That the House of Delegates of the Missouri State Medical Association recommends that the legislature move as speedily as possible to provide the funds required for progress in the field of mental health and also to enact such enabling legislation as may appear necessary for the implementation of the program, and be it further

Resolved, That copies of this resolution be forwarded to the President Pro Tempore of the Senate and the Speaker of the House of Representatives and that a copy also be sent to the Governor of the State of Missouri.

Mr. Speaker, I recommend the adoption of this portion of the report.

The motion was seconded and on vote this portion of the report was adopted.

The Reference Committee on Miscellaneous Affairs also considered the following resolution regarding the Public Service Program:

Whereas, The Public Service Program enacted by the 1960 MSMA House of Delegates was a state-wide effort designed to achieve better public relations, but was found by the Council to be difficult to administer during the past year, and

Whereas, Such public relations are, at the present time, dependent to a considerable extent upon the attitude of the medical profession toward the growing problems of geriatric medicine and,

Whereas, Since the last meeting of the MSMA House of Delegates in March, 1960, Congress enacted Public Law 86-788 (Kerr-Mills Law), and

Whereas, The AMA has officially supported the implementation of the Kerr-Mills bill as an alternative to Forand type of legislation, and

Whereas, The Jackson County Delegation feels that such legislation will provide adequate care for the elderly and indigent if implemented by the State of Missouri, therefore, be it

Resolved, That the Public Service Program designed to improve the public relations of the medical profession be continued, but that the program be modified to utilize the full effectiveness of the entire Missouri medical profession on a community and individual level, and, be it further

Resolved, That the Officers and Council of the Missouri State Medical Association and the headquarters office be charged with the responsibility of securing adequate and competent personnel in order to bring to the attention of each doctor personally the great importance of their active participation in the fight against socialized medicine by means of active support and full implementation of such programs.

Mr. Speaker, I move the adoption of this portion of this report.

The motion was seconded and on vote this portion of the report was adopted.

Mr. Speaker, I move the adoption of this report *in toto.*

The motion was seconded and on vote the report *in toto* was adopted.

UNFINISHED BUSINESS

The Secretary read the resolution proposing a change in the By-Laws which had lain on the table for the required time.

Resolved, That the By-Laws of the Missouri State Medical Association, Chapter VII, Section 2, be amended following the words "A Committee on Aging" by adding the following: "A Committee on Radiology and Ionizing Radiation," and by adding to Section 2 of Chapter VII immediately prior to the beginning of Section 3 the following: "The Committee on Radiology and Ionizing Radiation shall consider matters concerned with radiology and ionizing radiation and shall disseminate information regarding the use of radiology and ionizing radiation to physicians and other interested groups in this state."

Hon. Thomas B. Curtis was the banquet speaker.

Upon motion, duly seconded, the amendment to the By-Laws was adopted.

F. L. Kozal, M.D., Crystal City: Since this early hour

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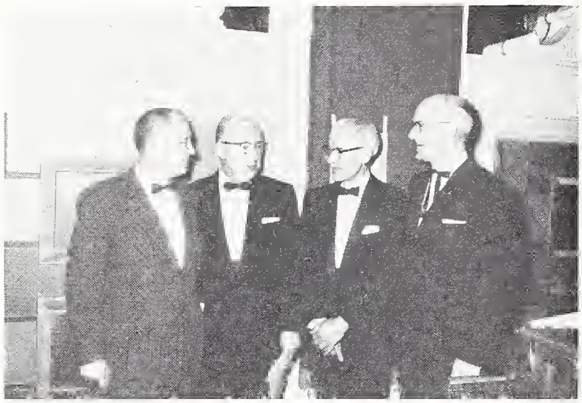
session has such adequate representation, since everyone seems to have enjoyed it so much, since business seems to have been expedited and we have been given sufficient latitude for debate and without any strain on making reservations and getting trains, planes and other means of transportation out of town, and since this allows for an earlier closing of the business aspect of this Annual Session, I move that we include this type of final session as a regular order of business in subsequent meetings regardless of their location.



Hon. Curtis, Dr. Muether, Dr. Summers and Dr. Hall chat following the banquet.

There being no objection to this new business, upon second, the motion was carried.

The Speaker of the House of Delegates installed the President, the President-Elect, the Vice Presidents, the AMA Delegates and Alternates, the Councilors, the Speaker and Vice Speaker of the House of Delegates.

J. H. Summers, M.D., Lebanon, read the appointments to committees to fill expired terms and chairmenships, which were approved by the House of Delegates, as follows:

COMMITTEE APPOINTMENTS, 1961

Scientific and Postgraduate Work: John I. Matthews, Jefferson City, Chairman; Wyeth Hamlin, Hannibal. Associate Members: Melvin C. Kasten, Cape Girardeau; Virgil Jeans, Joplin; Kenneth K. Keown, Columbia; Robert W. Smith, Marceline; Richard W. Yore, St. Louis; Peter J. Danis, St. Louis.

Defense: C. E. Hyndman, St. Louis, Chairman; L. P. Forgrave, St. Joseph; Harold W. Miller, Willow Springs.

Public Policy and Public Relations: Byron M. Stuart, Boonville, Chairman; Harold B. Rapp, Cape Girardeau; J. Will Fleming, Moberly; R. J. Crider, St. Charles; W. D. Bradshaw, Clinton; Floyd C. Atwell, Kansas City; C. B. Schoeberl, Joplin; William R. Lytle, Rolla; E. D. Imes, Maryville; R. R. Lyle, Versailles; Armand E. Brodeur, St. Louis.

Medical Education and Hospitals: Kenneth Glover, Mount Vernon, Chairman; Joseph C. Peden, Jr., St. Louis; Vernon E. Wilson, Columbia.

Cancer: George A. Carroll, St. Louis, Chairman; Charles E. Lockhart, Springfield; John E. Lamy, Sedalia. Associate Members: E. J. Schewe, Jr., Columbia; Harold C. Stricker, Jefferson City; Henry C. Allen, St. Louis; James R. McVay, Jr., Kansas City.

Medical Economics: G. W. Winn, Boonville, Chairman; John R. Forgrave, St. Joseph; Byron E. Watts, Jefferson City. Associate Members: Kenneth E. Knabb, Springfield; E. T. Hansbrough, Poplar Bluff; Rae W. Froelich, Lebanon.

Mental Health: James N. Haddock, Webster Groves, Chairman; Robert J. Mueller, St. Louis; Henry V. Guhleman, Jefferson City; George W. Forman, St. Joseph; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Frank M. Grogan, St. Louis; Albert Preston, Kansas City; N. Venay Bolin, Kansas City; James M. A. Weiss, Columbia.

Maternal Welfare: William B. See, Columbia, Chairman; James E. Keeler, Kansas City; A. C. Trueblood, St. Louis. Associate Members: C. G. Stauffacher, Sedalia; H. C. Wilhumsen, St. Joseph; Paul E. Kratz, Cape Girardeau; J. J. Wimp, Kirksville; MacDonald Bonebrake, Springfield; Eugene G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care: E. J. Schwartz, Springfield, Chairman; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; R. J. LaDriere, St. Louis; Guy N. Magness, University City; Clement E. Brooke, Columbia; James J. Pascoe, Nevada; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau; S. F. Cockerell, Independence.

Health and Public Instruction: J. R. McDaniel, St. Joseph, Chairman; C. Howe Eller, Clayton. Associate Members: Chester R. Peck, Kennett; John P. Mabrey, Plattsburg.

Dr. Matthews, Dr. Luck and Dr. Neal discussed the session.

Constitution and By-Laws: W. A. Bloom, Fayette, Chairman; John F. Rutledge, Crystal City; R. O. Muether, St. Louis.

Trauma: Robert E. Funsch, St. Louis, Chairman. Associate Members: Howard J. McAlhaney, Springfield; Otis E. James, Kansas City; Grafton A. Smith, Columbia.

Eye Health: John McLeod, Kansas City, Chairman; Michael F. Pernoud, St. Louis; H. B. Ivy, Springfield. Associate Members: Dick H. Underwood, Kansas City; Leslie C. Drews, St. Louis; Paul M. Beck, St. Joseph; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; Vernon B. Jackson, Fulton.

Laboratory Medicine: Angelo Lapi, Kansas City, Chairman (one year term to fill the unexpired term of Joseph E. Flynn, deceased); Eugene F. Tucker, St. Louis.

Industrial Health: H. M. Roebber, Bonne Terre, Chairman; Vencel W. Hollo, St. Louis; William H. Duncan, Kansas City. Associate Members: James W. Clawson, Springfield; C. Rush McAdam, St. Louis; Richard A. Sutter, University City.

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Diabetes: H. E. Oppenheimer, Clayton, Chairman; G. Bruce Lemmon, Springfield; H. M. Gilkey, Kansas City. Associate Members: W. H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph S. Casford, Kansas City; Thomas W. Burns, Columbia.

Anesthesiology: Edward O. Kraft, St. Louis, Chairman; S. Ross Melgaard, Kansas City; George W. Chesney, Joplin. Associate Member: Kenneth K. Keown, Columbia.

Hospital and Professional Relations: Ralph Perry, Kansas City, Chairman; Hollis Allen, St. Louis; Walter S. Sewell, Springfield. Associate Members: W. F. Francka, Hannibal; Willard Bartlett, St. Louis.

Dr. Summers presented the Past President's key to Dr. Muether at the banquet.

Control of Venereal Disease: Edwin M. Powell, Springfield, Chairman; John E. Byrne, St. Louis; A. W. Neilson, St. Louis.

Physical Medicine and Rehabilitation: D. Elliott O'Reilly, St. Louis, Chairman; F. O. Tietjen, Jefferson City. Associate Member: Otakar Machek, St. Louis; Edward B. Shires, Kansas City.

Civil Defense Disaster Medical Care: Carl D. Siegel, Sedalia, Chairman; M. P. Leech, Fayette; H. D. Steinbeck, Union; Carroll P. Hungate, Kansas City; John L. Mothershead, St. Joseph; John H. Walterscheid, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; O. P. Hampton, University City.

Aging: Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; R. O. Muether, St. Louis; C. Thorpe Ray, Columbia. Associate Members: Robert C. Kingsland, Clayton; Robert H. Tanner, Jefferson City; Donald H. Giesler, Osceola; John A. Griffith, Kansas City.

Special Committees

Tuberculosis: Florence E. MacInnis, Kansas City, Chairman; Paul Murphy, St. Louis; H. M. Roberts, Kansas City; Joseph L. Lucido, St. Louis; Walter C. Gray, St. Louis; David N. Kerr, St. Louis; John W. Polk, Springfield; Carl G. Popp, Sikeston; Judson I. Chalkley, Columbia.

Study of Cardiac Disease: Earl L. Loyd, Jefferson City, Chairman; James G. Janney, St. Louis; William I. Park, Springfield; William J. Shaw, Sr., Fayette; Jack M. Martt, Columbia; William L. Mundy, Kansas City; William J. Gillespie, St. Louis; Caryl A. Potter, St. Joseph; F. J. Biggs, Poplar Bluff; Joseph C. Edwards, St. Louis.

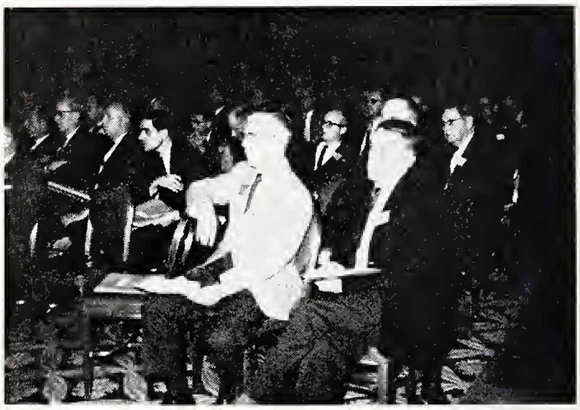
Rural Medical Service: Jack Mullen, Bonne Terre, Chairman; James H. Sweiger, Maysville; K. S. Latham, California; B. J. Bass, Salem; John F. Pearl, St. Clair; James E. Campbell, Macon; Charles A. Worley, Sweet Springs; Fred L. Wommack, Crane.

American Medical Education Foundation: James P. Murphy, St. Louis, Chairman; Glenn L. McElroy, Columbia; William T. McNew, Carthage; Russell D. Shelden, Kansas City; Allen I. Herman, St. Joseph.

Dr. and Mrs. Perry congratulated Dr. Muether on the completion of his term as President.

On motion of Dr. Weir, duly seconded, the Jackson County Medical Society was thanked for their hospitality during the session.

Dr. Don C. Weir, St. Louis, speaking for the St. Louis Medical Society and the St. Louis County Medical Society, invited the Association to meet in St. Louis in 1962.



Speakers held attention of their audiences.

Upon motion duly seconded, the invitation was accepted.

Upon motion, duly seconded, the House of Delegates adjourned at 9:15 a.m.

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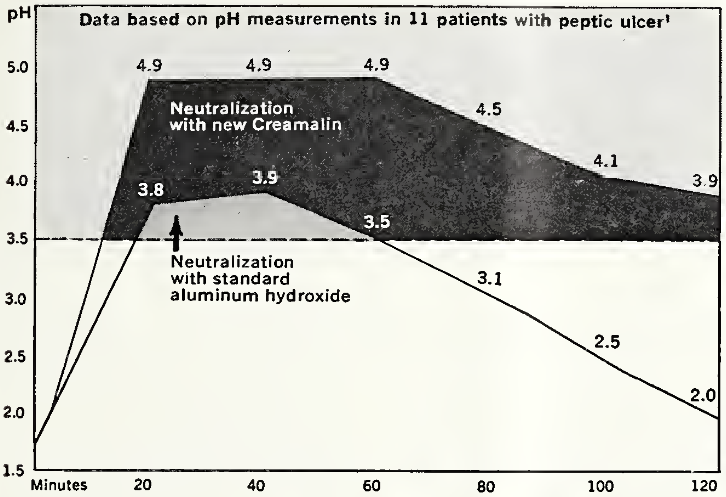

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Dosage: Gastric hyperacidity — from 2 to 4 tablets as necessary. Peptic ulcer or gastritis — from 2 to 4 tablets every two to four hours. Tablets may be chewed, swallowed whole with water or milk, or allowed to dissolve in the mouth. **How supplied:** Bottles of 50, 100, 200 and 1000.

1. Data in the files of the Department of Medical Research, Winthrop Laboratories. **2.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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THE COUNCIL

Hotel Muehlebach, Kansas City

March 19, 1961

The Council met at 9:30 a.m., March 19, at Hotel Muehlebach, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell, Paul R. Whitener, St. Louis; Leonard T. Furlow, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; Charles R. Doyle, St. Louis; John I. Matthews, Jefferson City; O. P. Hampton, University City; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; James R. McVay, Kansas City; Edgar Mothershead, Gene Lunn, Lemoine Skinner, Ray McIntyre, Tom R. O'Brien, St. Louis; John R. Buckner, Springfield; Helen Penn, St. Louis.

AUXILIARY ADVISORY COMMITTEE

Following the reading of a request from the Woman's Auxiliary, the following advisory committee was approved: Drs. Jordan Kelling, Waverly; Stanley S. Peterson, Springfield; Robert B. Bassett, St. Louis; Ralph Perry, Kansas City; J. H. Summers, Lebanon.

TUBERCULOSIS CONFERENCE

Dr. Hardwicke reported that a one day workshop will be held by the National Tuberculosis Association and the U.S.P.H.S. in Chicago in October and suggested that a member of the Committee on Tuberculosis attend. On motion, duly seconded, this was approved.

Dr. Stanley Hampton accepted the AMEF check in behalf of Washington University, as Dr. Wilson looked on.

MENTAL HEALTH LEGISLATION

Various bills dealing with mental health, some of them as related to public health, appropriations, names of state hospitals, and clinics, were discussed. On motion of Dr. Tillman, duly seconded, it was voted to refer these matters to the Committee on Mental Health asking them to obtain more information for their study of the bills and their implications.

TREASURER'S REPORT

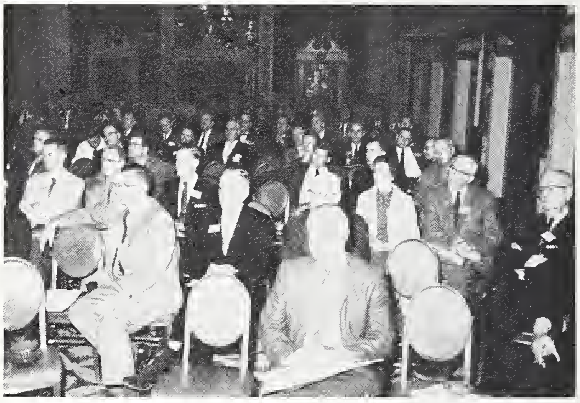
Dr. Doyle presented a financial statement, which, on motion, duly seconded, was approved.

MISSOURI STATE MEDICAL FOUNDATION

A progress report on the Missouri State Medical Foundation was given and it was stated that it would probably be ready for presentation for approval at the first meeting of the Council following the annual session.

SAFETY CONFERENCE

Mr. O'Brien reported on a meeting on Safety called by the Governor in Jefferson City recently. It was decided that a resolution be presented in the House of Delegates and on motion of Dr. Summers, duly seconded, the following resolution was adopted for presentation:



All sessions of the House were well attended.

WHEREAS, The profession of medicine and the Missouri State Medical Association have a strong and abiding interest in the problems of safety and accident prevention, and

WHEREAS, Medicine is deeply concerned with traffic accidents as one of the nation's leading causes of injury and death, and

WHEREAS, The Missouri Safety Council has developed and caused to be introduced in the state legislature a new traffic safety program in an effort to reduce motor vehicle accidents, and

WHEREAS, Missouri Governor John M. Dalton has endorsed this program and given it his active support, therefore be it

Resolved, That the Missouri State Medical Association House of Delegates commends those responsible for this program for their farsighted interest in the safety and welfare of Missouri citizens, and be it further

Resolved, That special commendation go to Governor Dalton for his support of traffic safety for the public good.

CONFERENCE ON AGING

Dr. Peterson and Mr. Skinner reported on a conference on Aging the preceding day at the AMA and said that the AMA was urging all states to implement the Kerr-Mills bill. After considerable discussion, it was agreed without motion or vote that the attitude of the Council should be reconsidered and studied further; also that instructions of the House of Delegates might direct action of the Council.

KING-ANDERSON BILL

The general situation on federal trends in health legislation was discussed, especially the King-Anderson bills. After discussion, on motion of Dr. Tillman, duly seconded, it was decided that the Council present the following resolution to the House of Delegates:

WHEREAS, S. 909 and H.R. 4222, known as the King-Anderson Bills, have been introduced in the Congress to implement the Administration proposals, including the provision for administration under the Social Security system, and similar bills may be proposed, and

WHEREAS, Any program for health care of the aged or other groups in our nation which uses the Social Security system for

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fills the gap between mild oral and potent parenteral analgesics[1-7]

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Each Percodan* Tablet contains 4.50 mg. dihydrohydroxycodeinone HCl, 0.38 mg. dihydrohydroxycodeinone terephthalate (warning: may be habit-forming), 0.38 mg. homatropine terephthalate, 224 mg. acetylsalicylic acid, 160 mg. acetophenetidin, and 32 mg. caffeine.

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1. Blank, P., and Boas, H.: Improved analgesia for moderate pain, Ann. West. Med. & Surg. 6:376, 1952. 2. Bonica, J. J., et al.: The management of postpartum pain with dihydrohydroxycodeinone (Percodan): Evaluation with codeine and placebo, West. J. Surg. 65:84, 1957. 3. Cass, L. J., and Frederick, W. S.: A controlled study in pain relief, M. Times 84:1318, 1956. 4. Chasko, W. J.: Pain-free dental surgery: Postoperative extension of the pain-free state, J. District of Columbia Dent. Soc. 31:3, No. 5, 1956. 5. Cozen, L.: Office Orthopedics, ed. 2, Philadelphia, Lea & Febiger, 1953, pp. 120, 138, 145, 156, 234. 6. Nicolson, W. P., Jr., and Skandalakis, J. E.: Control of postoperative pain, J.M.A. Georgia 46:471, 1957. 7. Piper, C. E., and Nicklas, F. W.: Percodan for pain in industrial practice, Indust. Med. 23:510, 1954; abstracted, Clin. Med. 3:1008, 1956, Current M. Digest 22:135, No. 3, 1955.

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administration, operation or taxation is bound to result in poorer quality medical care for the people at greatly increased costs, and

Whereas, There are available voluntary and private means of providing health care programs for our citizens that are vastly superior to the Federal programs proposed on a compulsory basis, therefore be it

Resolved, That the physicians of Missouri, through the House of Delegates of the Missouri State Medical Association, hereby register their opposition to the proposals to provide Federal health care programs through the Social Security system for any groups of the people, and, be it further

Resolved, That copies of this resolution be sent to the President of the United States and the members of the Congress from Missouri.

HEALTH FAIR

On motion of Dr. Tillman, duly seconded, it was decided that a resolution complimenting the four counties involved in the Health Fair be introduced by the Council unless one was forthcoming from some other source.

Meeting of March 22, 1961

The Council met at Hotel Muehlebach, Kansas City, March 22, 1961, with J. H. Summers, M.D., Lebanon, President, presiding. Those present were Drs. Summers; Joseph L. Fisher, St. Joseph; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; A. P. Rowlette, Moberly; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; Doyle C. McCraw, Bolivar; E. A. Stricker, St. James; W. D. English, Cardwell; Donald M. Dowell, Chillicothe; R. O. Muether, St. Louis; John A. Griffith, Kansas City; Messrs. Lemoine Skinner, Gene Lunn, Jordan Singleton, Ray McIntyre, T. R. O'Brien, and Helen Penn, St. Louis.

NEW COUNCILORS

New Councilors were introduced: Dr. A. P. Rowlette, Moberly, Second District; Doyle C. McCraw, Bolivar, Eighth District; W. D. English, Cardwell, Tenth District.

DR. DOWELL RESIGNATION

Dr. Dowell resigned as Councilor of the First Councilor District, and on motion, duly seconded, Dr. Joseph L. Fisher, St. Joseph, was named as Councilor until the next Annual Session. It was pointed out that Dr. E. A. Stricker, St. James, had been appointed a year ago to serve until the next Annual Session and that the delegates from the Ninth Councilor District elected him to complete the two year term.

The University of Kansas City Choir sang at the banquet.

CHAIRMAN

On motion of Dr. Furlow, duly seconded, Dr. Hollweg was elected Chairman of the Council. Dr. Hollweg took the chair and conducted the remainder of the meeting.

VICE CHAIRMAN

On motion of Dr. Dowell, duly seconded, Dr. Stuart was elected Vice Chairman of the Council.

Attendance during the session was consistently good.

OFFICERS

On motions, duly seconded, the following officers were elected: Secretary, John I. Matthews, M.D., Jefferson City; Treasurer, Charles R. Doyle, M.D., St. Louis.

MEDICAL TECHNOLOGISTS

Mr. O'Brien said that he had had a request through the Committee on Laboratory Medicine that the Missouri Society of Pathologists and the Missouri Society of Medical Technologists have a joint scholarship fund and that they be allowed to use the Association address as a mailing address. On motion of Dr. Stuart, duly seconded, this was approved.

LEGISLATIVE FUND

It was pointed out that in view of the action of the House of Delegates directing the implementation of the Kerr-Mills and continuation of a public service project there would be need for more monies than had been delegated for this type of work. With the understanding that the Council would be consulted before any large expenditures were made, on motion of Dr. Dowell, duly seconded, it was voted that up to $25,000 be used for this purpose if necessary.

KERR-MILLS IMPLEMENTATION

The implementation of the Kerr-Mills Bill was discussed including the question of whether a resolution should be presented to the legislature or if a bill should be introduced. The consensus of opinion was that a bill should be prepared and introduced.

NEXT MEETING

After discussion of possible time for the next meeting, which Dr. Dowell wished to have in Chillicothe, it was left to Dr. Dowell, Dr. Hollweg, and Mr. O'Brien to arrange a place and date.

Kenneth C. Hollweg, Chairman

How to help your patient stick to a diabetic diet

The secret ingredient in a successful diet is acceptance. A diabetic diet that contains measured amounts of popular foods is sure to win the cooperation of the patient. All the more so if the variety of dishes is great. Bouillon or soup might start the meal. Chops, chowder, stews, broiled tomatoes, even spaghetti and meat balls can be adapted as tempting main dishes in a diabetic diet. Sugar-free preserves, water-packed fruits and sorbitol ice cream make delicious stand-ins for sweets. For parties, low-calorie wafers and raw vegetables make good nibbling.

A glass of beer can add zest to a patient's diet

Carbohydrate 9.4 Gm; Protein 0.8 Gm; Fat, 0 Gm; Calories 104/8 oz. glass (Average of American Beers)

Appetizing foods are good reason to stay on a diet

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REGISTRATION AT THE ONE HUNDRED THIRD ANNUAL SESSION

First Councilor District—61

Allen, E. Warren, Carrollton
Ames, William H., St. Joseph
Baker, Warren C., Savannah
Bauman, Henry C., Maryville
Benson, Scott C., St. Joseph
Bohnsack, Ralph W., Brookfield
Calvert, Lewis C., Weston
Clark, C. L., Trenton
Conrad, Joseph, Chillicothe
Craig, Owen, St. Joseph
Cullers, Charles H. Trenton
Daley, F. R., Hamilton
Davault, G. K., Richmond
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Dunshee, Robert E., Maryville
Dwyer, R. D., North Kansas City
Ellsworth, Willard, Cainsville
Fisher, Joseph L., St. Joseph
Forgrave, John R., St. Joseph
Forgrave, L. Paul, St. Joseph
Grimes, Manning E., St. Joseph
Hendren, G. W., Liberty
Hobb, Earl B., Smithville
Howell, B. D., Brookfield
Ide, Lucien W., St. Joseph
Imes, E. D., Maryville
Jennings, Ethlyn, North Kansas City
Keltner, Raymond O., Raytown
King, Richard H., Clinton
Knepper, Paul A., St. Joseph
Lewis, A. S., Smithville
Luckenbill, Paul T., Plattsburg
McCracken, S. R., Excelsior Springs
McDonald, Wilbur P., St. Joseph
Mandler, George, Chillicothe
Martin, John N., St. Joseph
Matteson, Frank B., Grant City
Mundy, H. F., St. Joseph
Nelson, Fred L., St. Joseph
Nibbe, Albert F., Bethany
Nixon, Edward E., Gallatin
Petersen, H. E., St. Joseph
Pfeffer, Robert I., St. Joseph
Platz, John H., Carrollton
Redmond, William, St. Joseph
Riddell, Richard V., St. Joseph
Roberts, L. Marvin, North Kansas City
Rogers, John T., St. Joseph
Rost, William B., St. Joseph
Schertz, T. B., North Kansas City
Shevlin, Charles F., St. Joseph
Smith, James O., Clinton
Smith, Robert W., Marceline
Spalding, W. B., Plattsburg
Stacy, Winton T., St. Joseph
Stallard, Donald J., St. Joseph
Sweiger, James H., Maysville
Vandiver, V. D., Chillicothe
Williams, John M., Liberty
Willoughby, James W., Liberty

Second Councilor District—20

Bach, Lysle M., Hannibal
Barnett, F. A., Paris
Christensen, Roger F., Louisiana
Collins, Gretchen, Macon
Damron, E. O., Elsberry
Davis, Landis Y., Canton
Dreyer, P. V., Huntsville
English, M. T., Kirksville
Fleming, J. Will, Jr., Moberly
Fleming, Thomas S., Moberly
Grim, Edward M., Kirksville
Hamlin, Wyeth, Hannibal
Landau, Daniel B., Hannibal
Lanning, Robert J., Hannibal
Lewellen, Charles H., Louisiana
McArtor, T. R., Browning
Rice, Grover C., Brunswick
Roller, Merrill J., Hannibal
Rowlette, A. P., Moberly
Stuart, Daniel D., Brunswick

Third Councilor District—62

Allen, Henry C. Webster Groves
Aufderheide, G. Russell, St. Louis
Bassett, Robert B., St. Louis
Baumgarten, Walter, St. Louis
Benjamin, Durand, St. Louis
Boedeker, Roy V., St. Louis
Boemer, L. C., St. Louis
Brennan, Robert V., Kirkwood
Brodeur, Armand E., St. Louis
Cooper, Thomas J., St. Louis
Danis, Peter G., St. Louis
Doyle, Charles R., St. Louis
Edwards, Joseph C., St. Louis
Ernst, Edwin C., St. Louis
Funsch, Robert E., St. Louis
Furlow, Leonard T., St. Louis
Gillespie, William, St. Louis
Glaser, Morton J., St. Louis
Haddock, James N., Clayton
Hagebusch, O. E., St. Louis
Hampton, Stanley F., St. Louis
Hawkins, George L., Jr., Webster Groves
Hollo, Vencel W., St. Louis
Hutton, J. Lewis, St. Louis
Inkley, John J., St. Louis
Kaskie, C. R., Clayton
Kerr, David N., Clayton
King, James P., St. Louis
Kinsella, Edward, St. Louis
Kinsella, Ralph A., St. Louis
Lottes, J. Otto, St. Louis
Lucido, Joseph L., St. Louis
Kohler, Louis H., St. Louis
Kramolowsky, H. H., St. Louis
McAfee, Alan, St. Louis
Macnish, James M., St. Louis
Max, Paul F., St. Louis
Merenda, Sam J., St. Louis
Miller, Charles, Jr., Kirkwood
Mueller, Robert, St. Louis
Muether, R. O., St. Louis
Neilson, Arthur W., Clayton
Nester, Charles H., St. Louis
Nicolai, Charles H., St. Louis
Norton, William H., St. Louis
Olmsted, William H., St. Louis
Oppenheimer, Henry E., Clayton
Peden, Joseph C., St. Louis
Repetto, Albert, St. Louis
Rohlfing, Walter A., St. Louis
Schwartz, Melvin M., St. Louis
Sherwin, Charles S., St. Louis
Smolik, Edmund A., St. Louis
Stoneman, William, St. Louis
Thompson, J. William, St. Louis
Tichenor, R. W., St. Louis
Tucker, Eugene F., St. Louis
Vermillion, Crofford, St. Louis
Vohs, Carl F., St. Louis
Weiler, Thomas J., St. Louis
Weir, Don C., St. Louis
Witt, Clyde M., St. Louis

Fourth Councilor District—37

Bailey, W. H., St. Louis
Beam, Sim F., St. Louis
Blankenship, Dale M., Ballwin
Bozzo, Raymond J., Washington
Davis, E. W., St. Louis
Diehr, M. A., St. Louis
Ecker, D. B., Pacific
Feldaker, R. M., St. Louis
Harrington, William J., St. Louis
Hampton, Oscar P., St. Louis
Hoelscher, Harold F., Warrenton
Howe, Louis F., Brentwood
Kingsland, Robert C., Clayton
Koch, Robert E., Clayton
Magness, Guy N., University City
Miles, Paul W., St. Louis
Monat, Seymour, St. Louis
Moore, Walter L., St. Louis
Muench, L. O., Washington
Nuetzel, John A., Clayton
Perry, William D., St. Louis
Poggemeier, William, St. Charles
Randall, Don Q., St. Charles
Reinhard, Edward H., St. Louis
Reister, Dorothy D., Kansas City
Richardson, William R., Union
Roberts, Harold K., Clayton
Rother, Paul H., St. Charles
Schattyn, Martyn, St. Louis
Schechter, Samuel E., Clayton
Shaw, Carvel T., Hermann
Sterling, John A., Kirkwood
Sutter, Richard A., St. Louis
Walther, Roy A., Jr., St. Louis
Wepprich, Michael S., Washington
Whitener, Paul R., St. Louis
Wulff, George, St. Louis

Fifth Councilor District—48

Allen, William C., Columbia
Andersen, E. J. T., Montgomery City
Belden, E. A., Jefferson City
Belinson, Louis, Jefferson City
Bloom, W. A., Fayette
Buesseler, John A., Columbia
Burns, Thomas W., Columbia
Cohen, Harry, Columbia
Cope, James C., Columbia
Dietrich, Karl D., Columbia
Duval, Addison M., Jefferson City
Dwyer, Thomas L., Mexico
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Evans, A. McChesney, Columbia
Gardner, Joseph W., Glasgow
Garner, Lynn M., Jefferson City
Guhleman, Henry V., Jr., Jefferson City
Hardwicke, H. M., Jefferson City
Jackson, Robert L., Columbia
Jackson, V. B., Fulton
Jolly, Ben N., Mexico
Keats, Theodore E., Columbia
Keown, Kenneth, Columbia
Lyle, Ray, Versailles
Lodwick, Gwilym S., Columbia
McHaney, John W., Jefferson City
Martt, Jack M., Columbia
Matthews, John I., Jefferson City
Meinershagen, C. W., Jefferson City
Modlin, John J., Columbia
Moranville, B. A., Columbia
Neal, M. Pinson, Columbia
Ritterbusch, James K., Fulton
Schewe, E. J., Columbia
Shaw, William J., Fayette
Shaw, Gordon, Mexico
Shull, G. Donald, Jefferson City
Stephenson, Hugh E., Jr., Columbia
Stewart, William J., Columbia
Stuart, Byron M., Boonville
Tanner, Robert H., Jefferson City
Walters, Laura, Columbia
Washburn, J. Loren, Versailles
Watts, Byron E., Jefferson City
Wilson, Vernon E., Columbia
Winn, G. W., Boonville

Hotel Muehlebach

Dr. Dowell accepted the election as President-Elect at the last session of the House.

Sixth Councilor District—42

Aiken, George A., Marshall
Allen, Claude J., Rich Hill
Barger, O. B., Harrisonville
Blalock, Robert W., Marshall
Bradshaw, W. D., Clinton
Brasher, Ben H., Lexington
Cooper, R. Lee, Warrensburg
Cope, Joseph S., Lexington
Frein, Donald E., Warrensburg
Giesler, Don H., Osceola
Goldberg, I. E., Braymer
Gonser, Karl B., Sedalia
Goodson, William H., Liberty
Hansen, A. L., Butler
Harkness, Harry, Warrensburg
Haynes, Robert C., Marshall
Hollingsworth, Ray S., Clinton
Johnson, C. S., Warrensburg
Jones, Edward S., Harrisonville
Kelling, Jordan, Waverly
Lusk, Charles A., Butler
Luter, Carter W., Butler
Lawless, C. L., Marshall
Lederer, Charles M., Warrensburg
Long, David S., Harrisonville
McBurney, C. Alex, Slater
Maddox, R. Albert, Sedalia
Magee, Robert L., El Dorado Springs
Maxson, T. Reed, Warrensburg
Pascoe, James J., Nevada
Reid, James A., Marshall
Richter, William B., Stockton

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Walker, George S., Clinton
Walker, Hugh B., Clinton
Ward, Joe W., Lexington
Worley, Charles A., Sweet Springs
Wray, Rolla B., Nevada

Four new Councilors confer, Dr. Fisher, Dr. Rowlette, Dr. English and Dr. McCraw.

Seventh Councilor District—154

Allen, William B., Kansas City
Andrews, B. W., Kansas City
Atcheson, Bellfield, Kansas City
Atwell, Floyd C., Kansas City
Becker, Richard R., Kansas City
Bennett, James D., Kansas City
Benoit, Hector W., Jr., Kansas City
Bergmann, Victor H., Kansas City
Berry, Maxwell G., Kansas City
Berry, Neill, Kansas City
Boughnou, H. P., Kansas City
Boutros, Amin, Kansas City
Bowser, John F., Kansas City
Brams, Jack B., Kansas City
Brewster, Charlotte M., Prairie Village, Kan.
Brown, Robert S., Kansas City
Brumm, L. W., Kansas City
Bruner, Robert E., Kansas City
Buckner, Robert C., Kansas City
Buhler, Victor B., Kansas City
Byers, Philip L., Kansas City
Caldwell, John K., Kansas City
Carlson, H., Kansas City
Carrier, Edson C., Kansas City
Casebolt, M. B., Kansas City
Casford, Ralph S., Kansas City
Castles, John E., Kansas City
Coffey, Ralph R., Kansas City
Comer, Bates, Kansas City
Cooper, Charles S., Kansas City
Counsell, C. M., Kansas City
Culbertson, William F., Kansas City
Cutcliff, Daniel J., Kansas City
Dann, David S., Kansas City
Dorsch, Ervin H., Independence
Downey, James W., Kansas City
Duncan, Ralph E., Kansas City
Dwyer, Hugh L., Kansas City
Eisemann, Gustave, Kansas City
Eldridge, Charles J., Kansas City
Elliott, Raymond G., Kansas City
Enna, Carl D., Kansas City
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, Will R., Kansas City
Feist, George V., Kansas City
Fitzgerald, Robert H., Independence
Frick, J. Paul, Kansas City
Gainey, Harold L., Kansas City
Ganley, William Coyle, Kansas City
Gestring, Hugh A., Kansas City
Getelson, Joseph M., Kansas City
Gibson, David M., Kansas City
Gilkey, Harry M., Kansas City
Gist, William W., Kansas City
Glasscock, Ernest L., Kansas City
Goodwin, Robert F., Overland Park
Gottsch, Joseph C., Kansas City
Greene, W. Wallace, Kansas City
Griffiith, John A., Kansas City
Growdon, John A., Kansas City
Hall, Thomas B., Kansas City
Hess, Paul D., Leawood, Kan.
Hickerson, William H., Independence
Hill, J. H., Kansas City
Hoeper, Sam D., Kansas City
Hollweg, Kenneth C., Kansas City
Hunt, Claude J., Kansas City
Hurwitt, Frank, Kansas City
James, Otis E., Kansas City
Jansen, Robert, Kansas City
Johns, Leo E., Jr., Kansas City
Jonas, Harry S., Independence
Jones, T. Reid, Kansas City
Justus, John B., Kansas City
Keeler, James E., Kansas City
Kerr, Russell W., Kansas City
Kiene, Richard H., Kansas City
King, J. T., Kansas City
Kitchen, William M., Kansas City
Knoch, H. Kermit, Kansas City
Kratz, Frederick W., Kansas City
Kyger, Fred B., Kansas City
Lapi, Angelo, Kansas City
Leitch, C. G., Blue Springs
Leitz, Frank B., Kansas City
Levey, Harry B., Kansas City
Long, R. Stacy, Kansas City
Lyddon, H. R., Jr., Kansas City
McCunniff, William B., Kansas City
McFarland, M. Don, Kansas City
McLeod, John, Kansas City
McVay, James R., Kansas City
McVay, James R., Jr., Kansas City
MacInnis, Florence E., Kansas City
Meyer, Paul W., Kansas City
Miles, George O., Kansas City
Miller, Clint L., Lee's Summit
Miller, Gerald L., Kansas City
Mixson, William C., Kansas City
Moss, Paul, Kansas City
Mosser, Robert S., Independence
Mullen, Leo M., Kansas City
Multhauf, C. Joseph, Mission, Kan.
O'Neil, J. H., Kansas City
Ost, Mark D., Kansas City
Overesch, Harry B., Kansas City
Parker, Hubert M., Kansas City
Peete, Don C., Kansas City
Perry, Ralph, Kansas City
Pipkin, Garrett, Kansas City
Potter, L. G., Kansas City
Powell, Nelson E., Overland Park, Kan.
Reinhardt, George R., Kansas City
Reister, Philip D., Kansas City
Richert, Robert C., Kansas City
Robinson, A. W., Kansas City
Robinson, E. Kip, Kansas City
Russell, James L., Kansas City
Russell, Richard L., Kansas City
Sanders, William F., Kansas City
Sandy, Charles, Prairie Village, Kan.
Santoro, C. G., Kansas City
Schillie, Gene A., Kansas City
Schutz, Carl B., Kansas City
Shapiro, L. M., Kansas City
Sheldon, Russell D., Kansas City
Shechter, Nathan, Kansas City
Shypper, M. J., Kansas City
Singleton, J. Milton, Kansas City
Stacey, W. R., Independence
Staggs, William A., Kansas City
Stelle, Charles W., Kansas City
Steffen, L. F., Kansas City
Stockton, Raymond W., Kansas City
Stockwell, A. Lloyd, Kansas City
Tarson, Solomon S., Kansas City
Taylor, J. E., Kansas City
Trowbridge, E. H., Jr., Kansas City
Unger, Harold, Kansas City
Voth, Harold W., Kansas City
Wakefield, Franklin H., Kansas City
Webster, Joseph, Kansas City
Welker, Joseph E., Kansas City
Wheeler, Charles B., Kansas City
Whitman, Doyle C., Kansas City
Wilhelm, Warren, Kansas City
Wilkinson, Everett A., Kansas City
Williams, Frank R., Kansas City
Williams, Vincent T., Kansas City
Willoughby, Jean B., Kansas City
Withers, Orval R., Kansas City
Wolf, Jack W., Kansas City
Wortmann, Robert F., Kansas City

Eighth Councilor District—63

Allen, David O., Joplin
Allen, Jerry H., Springfield
Amos, James R., Springfield
Aubin, F. W., Branson
Bareis, Robert J., Marshfield
Barnett, Norman H., Joplin
Beers, E. G., Seymour
Birsner, Frank, Carthage
Blankenship, G. W., Neosho
Brasher, C. A., Mt. Vernon
Cain, Alvin R., Lamar
Cohle, Richard R., Carthage
Coller, Fred C., Springfield
Conrad, R. C., Springfield
Cooper, C. W., Thayer
Crawford, O. R., Springfield
DeTar, George F., Joplin
Elkins, R. F., Springfield
Farthing, Fred R., Springfield
Ferguson, John P., Springfield
Ferguson, R. L., Joplin
Ferrell, T. E., Springfield
Gentry, M. L., Springfield
Glover, Kenneth, Mt. Vernon
Grantham, Samuel A., Joplin
Graves, A. J., Mt. Vernon
Griffin, Evelyn, Buffalo
Griffin, O. A., Buffalo
Hall, David W., Springfield
Hall, Durward G., Springfield
H'Doubler, F. T., Jr., Springfield
Hobbs, George H., Mt. Vernon
Jeans, Virgil E., Joplin
Lowe, H. A., Springfield
Knabb, Kenneth E., Springfield
Koehler, John, Joplin
Lemmon, G. Bruce, Jr., Springfield
Lockhart, Charles E., Springfield
McAlhany, Howard, Springfield
McCallum, A. J. C., Aurora
McCraw, D. C., Bolivar
Macdonnell, C. R., Marshfield
Macdonnell, T. M., Marshfield
Maher, Robert W., Springfield
Mitchell, R. E., Springfield
Moseley, F. Thomas, Springfield
Napper, Marvin L., Springfield
Newman, Mary, Cassville
Peterson, Stanley S., Springfield
Powell, Edwin M., Springfield
Royce, James T., Noel
Schulte, G. A., Joplin
Schwartz, E. J., Springfield
Sewell, Walter S., Springfield
Simpson, Albert P., Springfield
Smith, C. Souter, Springfield
Snead, William H., Springfield
Tillman, Walter W., Springfield
Turner, Glenn O., Springfield
Whitten, M. Foster, Carthage
Wommack, Fred L., Crane
Wood, George H., Carthage
Wood, William W., Springfield

Ninth Councilor District—13

Bass, B. J., Salem
Carrington, H. W., Lebanon
Fisher, George E., Lebanon
Fowler, Marvin L., West Plains
Hogg, Garrett, Jr., Cabool
Hope, James L., Lebanon
Lytle, William R., Rolla
Miller, Harold W., Willow Springs
Smith, Rollin H., West Plains
Stricker, E. A., St. James
Summers, J. H., Lebanon
Underwood, M. K., Rolla
Walton, M. C., Mountain View

Tenth Councilor District—16

Barnes, Seth S., Cape Girardeau
Biggs, Fred J., Poplar Bluff
Bull, Ben M., Ironton
Burcham, Tom, Doniphan
Campbell, Edward D., Cape Girardeau
English, Wallace D., Cardwell

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- Patients with High Blood Pressure
- Patients with Myasthenia Gravis
- Asthmatics
- Hemophilics
- Patients Who May Need Blood Grouping Known at Once
- Identification of Adults and Children

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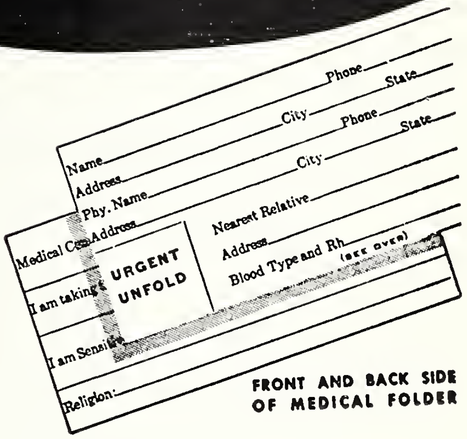
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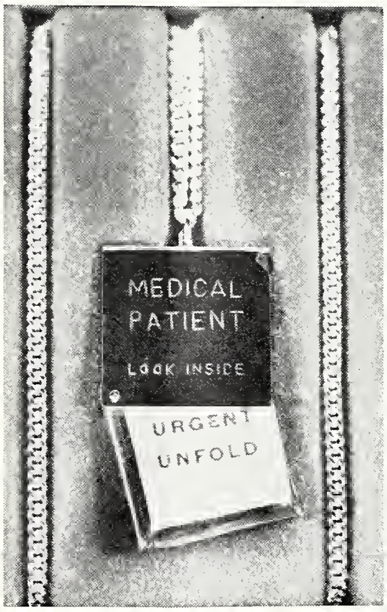
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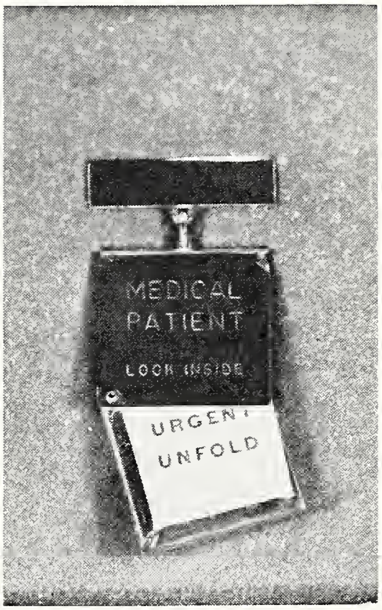
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Kozal, Frank L., Crystal City
McDermott, A. E., Perryville
McGinty, Charles P., Cape Girardeau
Ridings, Harold D., Cape Girardeau
Shoss, Milton, Cape Girardeau
Zimmerman, J. A., Kennett

Guest Speakers—10

Burchell, Howard, Rochester, Minn.
Chapman, John S., Dallas, Texas
Crile, George, Jr., Cleveland, Ohio
Curtis, Thomas B., Webster Groves, Mo.
Dimond, E. Grey, La Jolla, Calif.
Hardin, Robert C., Iowa City, Iowa
Koelsche, Giles A., Rochester, Minn.
Luck, J. Vernon, Los Angeles, Calif.
Smith, Jackson, Chicago, Ill.
West, Louis J., Oklahoma City, Okla.

Guest Physicians—37

Abella, Bienvenido, Kansas City
Behrer, M. Remsen, St. Louis
Brumley, H. W., Kansas City
Campbell, Albert J., Sedalia
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Wiens, John W., Kansas City, Kan.
Wrightman, F. E., Sabetha, Kan.
York, Dallas L., Creston, Iowa

There were registered 179 exhibitors, 90 Woman's Auxiliary, 135 medical technicians, 20 guests and 546 physicians. Total Registration 970.

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CORRESPONDENCE

Minority Report on Action Taken by MSMA Concerning Implementation of Kerr-Mills Bill and Related Items

To the Editor:

This must be written and reported because I feel that the action taken by the House of Delegates does not reflect the true and composite feeling of all the doctors in Missouri.

On the first meeting of the House of Delegates resolutions were introduced to implement the Kerr-Mills Bill to its fullest extent; remove the restriction that doctors could not be paid from government monies, and urge the passage of a lien and recovery act. These were all referred to the Reference Committee on Miscellaneous Affairs.

At the meeting of this committee there was extended debate pro and con—both sides bringing up arguments which had a lot of thought and sense behind them.

My own feeling was at that time and is now, that we should not go on record as implementing the bill in any way; that we should remove the action taken in 1958 which prohibits doctors from accepting government monies as pay, and that a lien and recovery act was a very desirable thing to be in favor of.

My reasons for each of these decisions are as follow, taken in the order as presented above.

I feel that the legislature of Missouri will do what they want with the Kerr-Mills Bill regardless of what our feelings on the matter are; therefore, it would be well for us not to be on record as favoring in any way a socialistic measure even though it has been approved by the AMA. I believe we should create a strong image of our profession and not procrastinate by saying in effect, "We will favor and support a little socialization but not a lot."

No true honest need has been established over and above that which we cannot handle by our own methods, implemented by local charitable and local government agencies. Representative Curtis expressed this same idea—even urged this action on us.

The argument that if we did not make the Kerr-Mills work, a stronger, probably totally socialistic law would be passed. With this premise I disagree most whole heartedly, for I think these avowed socialistic schemes are going to be fought tooth and nail on a national level and beaten. The socializers know this but are willing to try. Especially if by so doing, they can at least get through a lesser measure which still would be a step forward for them but a step back for us.

The 1958 action by the MSMA House of Delegates prohibiting the doctors from accepting government funds was, in my opinion, unrealistic and did not reflect the true feeling of the doctors of MSMA. I do not believe that at any time the medical profession should be in the position of not charging for its services. To do otherwise would put a powerful argumentive weapon in the hands of our enemies for future use against us. Furthermore, it gives an unrealistic picture when cost analyses are being made, and if a service has been rendered, a charge should be made to give it value; which charge then can be scaled down, cancelled, collected and turned back to the patient but all at the discretion of the individual doctor and not an arbitrary collectivistic rule.

The need for a lien and recovery act is long overdue. This, if anything, will do more to place the responsibility for medical care back on the individual's and family's shoulders. There are just too many relatives who are heirs apparent to sick folks and who should be helping in their care but find it easier to let someone else shoulder the burden; and then at the death of the individual receive the heritage free and clear. This is not right and these people should be made to pay back as much as possible or assume the burden in the first place so as to keep the heritage unencumbered. The effect of such laws where they are in force has resulted in a greatly reduced number on welfare.

The committee returned to the second meeting of the House of Delegates with their recommendations and again there were pro and con discussions to the point that it was obvious no common ground of agreement had been found, and it was referred back to the committee until after we had heard Representative Curtis and had more open committee hearings.

The last meeting of the House of Delegates was a morning meeting, and prior to it I was able to discern what was being recommended by the committee and having poled a representative number of delegates found it was acceptable. The vote was a majority in favor of passing the committee's recommendation; but there was one dissenting vote—mine.

It is my opinion that one dissenting vote represents a lot of doctors in this state and will grow in importance as time goes on because I do not believe we can compromise our ideals without suffering for it in the long run. We will all learn that a little socialism (if we are duped into accepting it as a legitimate need) inevitably leads to total socialism and our total enslavement.

Respectfully submitted,
R. D. Dwyer, M.D.
Delegate, Clay County

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CIRCULATES AFTER STACKS

Missouri Medicine

OURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

JULY 15, 1961

VOLUME 58, NUMBER 7-X

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Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Articles are accepted for publication on condition that they are contributed solely to this journal.

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104th Annual Session, St. Louis

March 18, 19, 20, 21, 1962

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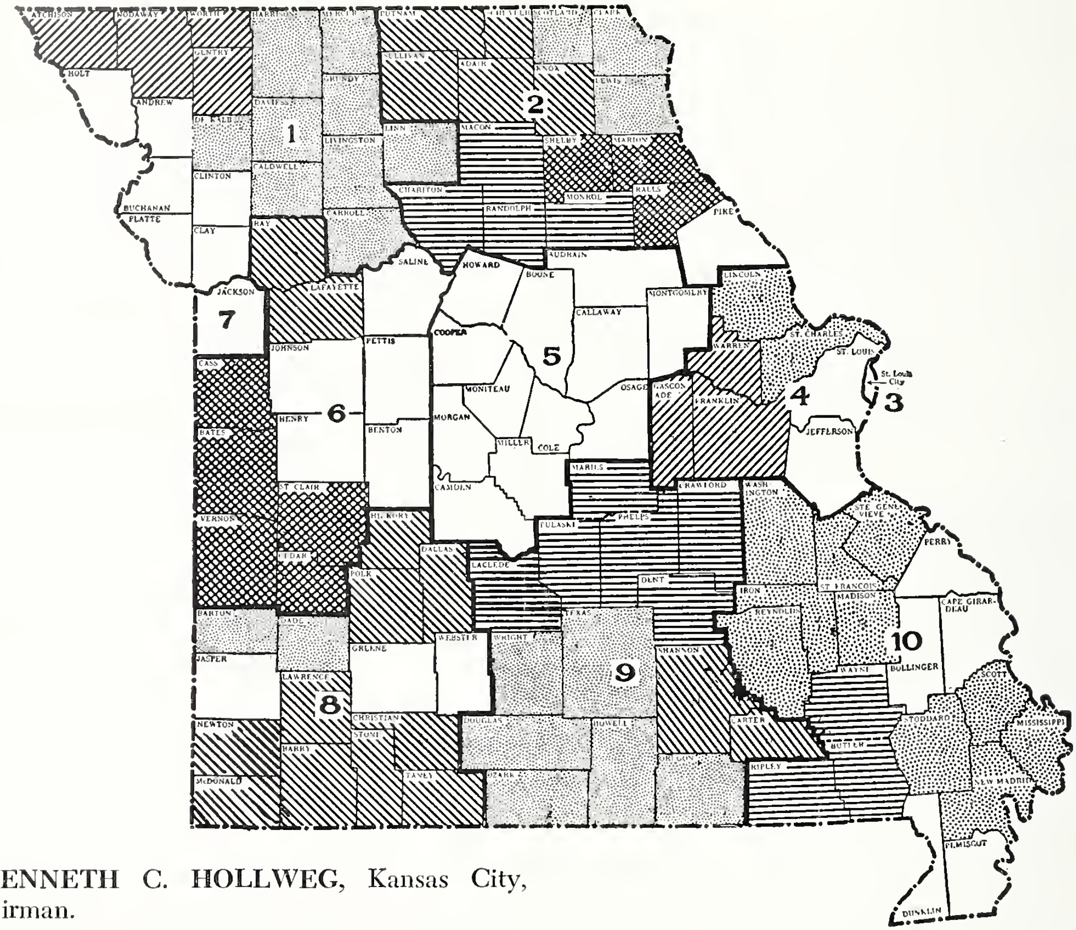
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GENTRY
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ADAIR
KNOX
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DAVIESS
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DE KALB
LINN
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SHELBY
MARION
LIVINGSTON
CALDWELL
CLINTON
CHARITON
MONROE
RALLS
BUCHANAN
PLATTE
CARROLL
RANDOLPH
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Shaded areas show hyphenated component societies. Counties listed in italics are unorganized.

Component Societies in Affiliation With The Missouri State Medical Association

COUNTY	DISTRICT	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
Andrew	1	V. R. Wilson	Rosendale	Warren C. Baker	Savannah
Audrain	5	Ned D. Rodes	Mexico	Gordon Shaw	Mexico
Barton-Dade	8	H. M. Arnold	Lamar	T. W. Carroll	Lamar
Benton	6			James A. Logan	Warsaw
Boone	5	Edward L. Washington	Columbia	Thomas W. Burns	Columbia
Buchanan	1	Judson M. Hughes	St. Joseph	William B. Rost	St. Joseph
Butler-Ripley-Wayne	10	Fred Kneibert	Poplar Bluff	E. T. Hansbrough	Poplar Bluff
Callaway	5	James K. Ritterbusch	Fulton	V. B. Jackson	Fulton
Camden	5				
Cape Girardeau	10	Seth S. Barnes	Cape Girardeau	E. W. Johnson	Cape Girardeau
Carter-Shannon	9	H. D. Rollins	Winona		
Chariton-Macon-Monroe-Randolph	2	S. R. Szymanski	Moberly	J. W. Fleming	Moberly
Clay	1	Robert H. Hodge	N. Kansas City	Bernard L. Mullins	N. Kansas City
Clinton	1	W. B. Spaulding	Plattsburg	J. B. Mabrey	Plattsburg
Cole	5	Robert H. Tanner	Jefferson City	C. Stuart Exon	Jefferson City
Cooper	5	G. L. Chamberlain	Boonville	D. Hata	Boonville
Dallas-Hickory-Polk	8	C. H. Barnett	Bolivar	Mary E. P. Griffin	Buffalo
Dunklin	10	Charles Merryman	Senath	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	John B. Ryan	Washington	George A. Richardson	Union
Grand River Medical Society (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	C. L. Clark	Trenton	Frank R. Daley	Hamilton
Greene	8	John P. Ferguson, Jr.	Springfield	F. T. H'Doubler, Jr.	Springfield
Henry	6	Gene McFadden	Clinton	R. S. Hollingsworth	Clinton
Howard	5	W. A. Bloom	Fayette	M. P. Leech	Fayette
Jackson	7	Wm. M. Kitchen	Kansas City	Ira T. Smith	Kansas City
Jasper	8	John W. Koehler	Joplin	David Allen	Joplin
Jefferson	4	R. Bolgar	Festus	Frank L. Kozal	Crystal City
Johnson	6	M. Garcia Gonzales	Warrensburg	Charles M. Lederer	Warrensburg
Lafayette-Ray	6	Walter K. Koppenbrink	Higginsville	Thomas B. Cook	Richmond
Lewis-Clark-Scotland	2	J. R. Bridges	Kahoka	L. Y. Davis	Canton
Lincoln-St. Charles	4	Don Q. Randall	St. Charles	V. P. Muenster	St. Charles
Marion-Ralls-Shelby	2	Lysle M. Bach	Hannibal	Wyeth Hamlin	Hannibal
Mid Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	E. E. Feind	Rolla	M. K. Underwood	Rolla
Miller	5			C. T. Buehler	Eldon
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)	10	R. A. Huckstep	Farmington	W. Paul Dennis	Flat River
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
Montgomery	5	E. J. T. Andersen	Montgomery City	Samuel J. Byland	Wellsville
Morgan	5	Robert R. Lyle	Versailles	Ruth Kauffman	Versailles
Nodaway-Holt-Atchison-Gentry-Worth	1	W. R. Jackson	Maryville	Robert E. Dunshee	Maryville
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Spencer L. Freeman	Kirksville	Paul E. Hilton	Kirksville
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)	8	J. R. Carter	Neosho	F. B. Brown	Aurora
Pemiscot	10	A. G. Shirey	Hayti	W. O. Bryant	Hayti
Perry	10	James F. Fairchild	Perryville	A. E. McDermott	Perryville
Pettis	6	Robert H. Stewart	Sedalia	T. Spencer Hopkins	Sedalia
Pike	2	Roger F. Christensen	Louisiana	W. Joe Martin	Louisiana
Platte	1	H. Graham Parker	Platte City	H. C. Thurman	Parkville
St. Louis City	3	Don C. Weir	St. Louis	Edward D. Kinsella	St. Louis
St. Louis County	4	George Wulff, Jr.	St. Louis	Charles Miller	St. Louis
Saline	6	John R. Lawrence	Marshall	B. F. Knipschild	Marshall
Semo County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	John Dernoncourt	Charleston	T. C. Buckthorpe	Sikeston
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	D. E. Tiffany	Mountain View	Rollin H. Smith	West Plains
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon)	6	Robert Magee	Eldorado Springs	Carter Luter	Butler

Towns and Counties

A

Adrian, Bates County
Affton, St. Louis County*
Albany, Gentry County
Altenburg, Perry County
Appleton City, St. Clair County
Aurora, Lawrence County
Ava, Douglas County

B

Bakersfield, Ozark County
Ballwin, St. Louis County*
Belton, Cass County
Berger, Franklin County
Berkeley, St. Louis County*
Bethany, Harrison County
Bloomfield, Stoddard County
Blue Springs, Jackson County
Bolivar, Polk County
Bonne Terre, St. Francois County
Boonville, Cooper County
Bourbon, Crawford County
Bowling Green, Pike County
Branson, Taney County
Braymer, Caldwell County
Brentwood, St. Louis County*
Bridgeton, St. Louis County*
Brookfield, Linn County
Browning, Linn County
Brunswick, Chariton County
Buffalo, Dallas County
Butler, Bates County

C

Cabool, Texas County
Cainsville, Harrison County
California, Moniteau County
Camdenton, Camden County
Cameron, Clinton County
Campbell, Dunklin County
Canton, Lewis County
Cape Girardeau, Cape Girardeau County
Cardwell, Dunklin County
Carl Junction, Jasper County
Carrollton, Carrol County
Carthage, Jasper County
Caruthersville, Pemiscot County
Cassville, Barry County
Centralia, Boone County
Chaffee, Scott County
Charleston, Mississippi County
Chesterfield, St. Louis County*
Chillicothe, Livingston County
Clayton, St. Louis County*
Clinton, Henry County
Coatsville, Schuyler County
Columbia, Boone County
Concordia, Lafayette County
Crane, Stone County
Creve Coeur, St. Louis County*
Crystal City, Jefferson County
Cuba, Crawford County

D

Desloge, St. Francois County
DeSota, Jefferson County
Dexter, Stoddard County
Doniphan, Ripley County
Drexel, Cass County

E

East Prairie, Mississippi County
Edgerton, Platte County
Edina, Knox County
Eldon, Miller County
El Dorado Springs, Cedar County
Elsberry, Lincoln County
Eureka, St. Louis County*
Everton, Jackson County
Excelsior Springs, Clay County

F

Farmington, St. Francois County
Faucett, Buchanan County
Fayette, Howard County
Fenton, St. Louis County*
Ferguson, St. Louis County*
Festus, Jefferson County
Flat River, St. Francois County
Florissant, St. Louis County*
Forsyth, Taney County
Fort Leonard Wood, Phelps County
Fredericktown, Madison County
Frontenac, St. Louis County*
Fulton, Callaway County

G

Gallatin, Daviess County
Gashland, Clay County
Gideon, New Madrid County
Glasgow, Howard County
Glendale, St. Louis County*
Gordonville, Cape Girardeau County
Grandview, Jackson County
Grant City, Worth County
Gravois Mills, Jackson County
Greenfield, Dade County
Green Ridge, Pettis County

H

Hamilton, Caldwell County
Hannibal, Marion County
Harrisonville, Cass County
Hartville, Wright County
Hayti, Pemiscot County
Herculaneum, Jefferson County
Hermann, Gasconade County
Hickman Mills, Jackson County
Higginsville, Lafayette County
Hillsboro, Jefferson County
Holden, Johnson County
Hopkins, Nodaway County
Hornersville, Dunklin County
Houston, Texas County
Houstonia, Pettis County
Humansville, Polk County
Hume, Bates County
Huntsville, Randolph County

I

Illmo, Cape Girardeau County
Independence, Jackson County
Ironton, Iron County

J

Jackson, Cape Girardeau County
Jefferson Barracks, St. Louis County*
Jefferson City, Cole County
Jennings, St. Louis County*
Joplin, Jasper County

K

Kahoka, Clark County
Kansas City, Jackson County
Kennett, Dunklin County
Keytesville, Chariton County
Kimmswick, Jefferson County
King City, Gentry County
Kirksville, Adair County
Kirkwood, St. Louis County*
Knob Noster, Johnson County
Koch, St. Louis County*

L

Ladue, St. Louis County*
La Grange, Lewis County
Lakeview Heights, Benton County
Lamar, Barton County
La Monte, Pettis County
Leadwood, St. Francois County
Leasburg, Crawford County
Lebanon, Laclede County
Lee's Summit, Jackson County
Leeton, Johnson County
Lemay, St. Louis County*
Lexington, Lafayette County
Liberty, Clay County
Licking, Texas County
Lilbourn, New Madrid County
Lockwood, Dade County
Louisiana, Pike County

M

Macon, Macon County
Malden, Dunklin County
Maplewood, St. Louis County*
Marceline, Linn County
Marshall, Saline County
Marshfield, Webster County
Marthasville, Warren County
Martin City, Jackson County
Maryville, Nodaway County
Maysville, De Kalb County
Mexico, Audrain County
Miami, Saline County
Milan, Sullivan County
Miller, Lawrence County
Moberly, Randolph County
Monett, Barry County
Monroe City, Monroe County
Montgomery City, Montgomery County
Morehouse, New Madrid County
Morrisville, Polk County
Mound City, Holt County
Mountain Grove, Wright County
Mountain View, Howell County
Mount Vernon, Lawrence County

N

Neosho, Newton County
Nevada, Vernon County
New Bloomfield, Callaway County
New Florence, Montgomery County
New Haven, Franklin County
New Madrid, New Madrid County
Nixa, Ozark County
Noel, McDonald County
Norborne, Carroll County
Normandy, St. Louis County*
North Kansas City, Clay County

O

Oak Grove, Jackson County
Odessa, Lafayette County
O'Fallon, St. Charles County
Olivette, St. Louis County*
Oran, Scott County
Osceola, St. Clair County
Overland, St. Louis County*
Owensville, Gasconade County
Ozark, Christian County

P

Pacific, Franklin County
Palmyra, Marion County
Paris, Monroe County
Parkville, Platte County
Parma, New Madrid County
Pattonville, St. Louis County*
Perryville, Perry County
Piedmont, Wayne County
Pilot Grove, Cooper County
Pine Lawn, St. Louis County*
Platte City, Platte County
Plattsburg, Clinton County
Pleasant Hill, Cass County
Poplar Bluff, Butler County
Portageville, New Madrid County
Potosi, Washington County
Princeton, Mercer County

R

Raytown, Jackson County
Reeds, Jasper County
Reeds Spring, Stone County
Republic, Greene County
Rich Hill, Bates County
Richmond, Ray County
Richmond Heights, St. Louis County*
Ridgeway, Harrison County
Robertson, St. Louis County*
Rock Hill, St. Louis County*
Rockport, Atchison County
Rolla, Phelps County
Rosendale, Andrew County

S

St. Ann, St. Louis County*
St. Charles, St. Charles County
St. Clair, Franklin County
Ste. Genevieve, Ste. Genevieve County
St. James, Phelps County
St. Joseph, Buchanan County
St. Louis City*
Salem, Dent County
Salisbury, Chariton County
Sappington, St. Louis County*
Savannah, Andrew County
Sedalia, Pettis County
Sedgewickville, Bollinger County
Senath, Dunklin County
Seymour, Webster County
Shelbina, Shelby County
Shelbyville, Shelby County
Shrewsbury, St. Louis County*
Sikeston, Scott County
Silex, Lincoln County
Slater, Saline County
Smithton, Pettis County

Smithville, Clay County
Springfield, Greene County
Stanberry, Gentry County
Steele, Pemiscot County
Steelville, Crawford County
Stockton, Cedar County
Strafford, Greene County
Strasburg, Cass County
Sullivan, Franklin County
Sweet Springs, Saline County

T

Tarkio, Atchison County
Thayer, Oregon County
Tipton, Moniteau County
Trenton, Grundy County
Troy, Lincoln County

U

Union, Franklin County
Unionville, Putnam County
University City, St. Louis County*

V

Valley Park, St. Louis County*
Vandalia, Audrain County
Versailles, Morgan County

W

Walnut Grove, Greene County
Wardell, Pemiscot County
Warrensburg, Johnson County
Warrenton, Warren County
Warsaw, Benton County
Washington, Franklin County
Waverly, Lafayette County
Waynesville, Pulaski County
Webb City, Jasper County
Webster Groves, St. Louis County*
Wellsville, Mantgomery County
Wentzville, St. Charles County
Weston, Platte County
West Plains, Howell County
Willow Springs, Howell County
Windsor, Henry County
Winona, Shannon County
Winston, Daviess County

---

* May belong to St. Louis County or to St. Louis Medical Society.

Alphabetical List of Members

A

Aaron, George A., Independence
Abele, William A., Boonville
Abell, Walter E., St. Louis
Abrams, Morris, St. Louis
Acker, Harry L., St. Louis
Ackerman, Lauren V., St. Louis
Acuff, William J. Knoxville, Tenn.
(Member Pemiscot County Medical Society)
Adams, Howard D., Liberty
Adams, James T., Fort Leonard Wood
(Member St. Louis Medical Society)
Adelman, Arthur, Kansas City
Adler, Arthur, Kansas City
Adler, Benard C., University City
Adriany, Joseph, Mt. Vernon
Agee, Loren G., Hickman Mills
Agress, Harry, St. Louis
Ahern, Archibald M., St. Louis
Ahlefeld, Charles B., Kansas City
Ahlering, George H., Clayton
Ahlvin, Robert C., St. Louis
Aiken, George A., Marshall
Aiken, Richard F., Marshall
Aisenstadt, E. Albert, Kansas City
Aitken, Louis F., St. Louis
Alberts, Phillip S., Portland, Ore.
(Member Jackson County Medical Society)
Alberty, Omer L., Carl Junction
Albrecht, Franklin H., St. Louis
Alden, Arthur M., St. Louis
Aldrich, James T., St. Louis
Alex, Morris, St. Louis
Alexander, Harry L., St. Louis
Allain, James J., St. Joseph
Allaman, John M., Sarasota, Fla.
(Member Buchanan County Medical Society)
Allan, James R., Excelsior Springs
Allbee, Roger H., Crystal City
Allebach, Hobart K., Kansas City
Allen, Charles H., Independence
Allen, Claude J., Rich Hill
Allen, David O., Joplin
Allen, Erroll W., Carrollton
Allen, Henry C., Clayton
Allen, Hollis N., St. Louis
Allen, Horace E., Columbia
Allen, James H., St. Louis
Allen, Jerry H., Springfield
Allen, Joseph E., Columbia
Allen, Melvin A., St. Louis
Allen, Robert E., Kansas City
Allen, S. Lloyd, Parkville
Allen, Willard M., St. Louis
Allen, William B., Kansas City
Allen, William C., Columbia
Allen, William E., Jr., St. Louis
Allen, William H., Nevada
Almond, Carl H., Columbia
Alsop, Webb S., Jr., Kansas City
Alsup, Frederick F., Kalispell, Mont.
(Member Ozarks Medical Society)
Althaus, Carl J., St. Louis
Altheide, Harvey E., Ladue
Altheide, J. Paul, St. Louis
Altomare, Edward P., Kansas City
Altringer, Arthur N., Kansas City
Altringer, Mary P., Hickman Mills
Alvis, Bennett Y., St. Louis
Alvis, Edmund B., St. Louis
Ames, William H., St. Joseph
Amos, James R., Springfield
Anast, Constantine S., Columbia
Andersen, E. J. T., Montgomery City
Anderson, A. Isadore, Kansas City
Anderson, Paul B., Neosho
Anderson, Raymond B., Kansas City
Anderson, Richard W., Kansas City
Andrae, Robert L., Louisiana
Andreassen, Dimil F., Rolla
Andrews, Berneil W., Kansas City
Andrus, Bailey C., Kansas City
Anstey, George, St. Louis
Anthony, Dallas, Springfield
Apicella, Frank V., St. Louis
Appleberry, Charles H., Rivermines
Appleford, G. Burton, Prairie Village, Kan.
(Member Jackson County Medical Society)
Aquino, Philip J., Caruthersville
Archer, Perry C., Shelbyville
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Arneson, Axel N., St. Louis
Arney, William G., St. Louis
Arnold, Eugene L., St. Louis
Arnold, Herbert M., Lamar
Aronberg, Lawrence M., St. Louis
Arst, Herbert E., Salina, Kan.
Member Jackson County Medical Society)
Arzt, Franz, Fort Lauderdale, Fla.
(Member St. Louis Medical Society)
Aschman, Theodore H., Kansas City
Asel, Norman D., Columbia
Ash, Charles J., Springfield
Asher, A. Graham, Kansas City
Ashley, Hugh V., Cape Girardeau
Ashley, Hugh, Jr., Cape Girardeau
Ashley, Thomas F., Springfield
Atcheson, Bellefield, Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Atkinson, Thomas E., Jr., Springfield
Atwell, Floyd C., Kansas City
Aubin, Francis W., Branson
Auer, Arthur I., St. Louis
AufderHeide, G. Russell, St. Louis
Augustine, Robert W., St. Joseph
Aull, John, Kansas City
Auner, Cecil R., Springfield
Austin, Martin G., Webster Groves
Avery, Willard B., Boonville
Ayars, Treston R., St. Louis
Aylward, Howard J., St. Louis
Azzouni, J. N., St. Louis

B

Bach, Lysle M., Hannibal
Bachmann, Paul L., Independence
Backer, Matthias H., Jr., St. Louis
Backlar, Joseph, St. Louis
Baer, Alvin J., Kansas City
Bagby, James W., Clayton
Baggot, Michael C., Alton, Ill.
(Member St. Louis Medical Society)
Bahn, Charles F., Cape Girardeau
Bailey, Alan H., Mt. Vernon
Bailey, Drennan, St. Louis
Bailey, Frank A., St. Louis
Bailey, Fred W., St. Petersburg, Fla.
(Member St. Louis Medical Society)
Bailey, William H., St. Louis
Baird, J. Edward, Excelsior Springs
Baker, James M., Columbia
Baker, Josephine D., Moberly
Baker, Philip J., Independence
Baker, Warren C., Savannah
Balazs, Karl J., St. Louis
Baldwin, Paul, Kennett
Baldwin, Richard, Springfield
Bales, Eugene L., Carrollton
Ball, James E., Kansas City
Ballard, V. Bryce, Kansas City
Bandle, Donald F., St. Louis
Banet, Samuel R., St. Louis
Banton, William C., St. Louis
Barber, John J., Corrigan, Tex.
(Member Green County Medical Society)
Barbour, Marvin R., Poplar Bluff
Barden, Frank W., Creve Coeur
Bardenheier, J. Phil, St. Louis
Bare, Chester I., Jr., Raytown
Bare, Edward F., Tarkio
Bareis, Robert J. Marshfield
Barelli, Pat A., Kansas City
Barger, O. B., Harrisonville
Barker, Jesse W., St. Louis
Barnard, John L., Jr., Kansas City
Barnes, Charles R., Ventura, Calif.
(Member St. Louis Medical Society)
Barnes, Robert H., Kansas City
Barnes, Seth S., Cape Girardeau
Barnett, Charles H., Bolivar
Barnett, Floyd A., Paris
Barnett, Gordon P., Kansas City
Barnett, Julian H., St. Louis
Barnett, Norman H., Joplin
Barone, Paul L., Nevada
Barrett, Scott R., St. Louis
Barrow, Jack, St. Louis
Barry, Gerald W., Kansas City
Barry, John W., Kansas City
Barry, William B., Kansas City
Bartels, Leo G., St. Louis
Bartlett, Robert W., St. Louis
Bartlett, Willard, Jr., Clayton
Bartnick, Mitchel L., St. Louis
Bascom, Charles H., St. Joseph
Baska, R. E., Appleton City
Bass, Billy J., Salem
Bassett, Robert B., St. Louis
Bates, George C., Kansas City
Battersby, Richard S., Columbia
Bauer, John D., St. Louis
Bauer, Joseph A., St. Louis
Bauer, Maria, Granite City, Ill.
(Member St. Louis Medical Society)
Bauer, Otto, Granite City, Ill.
(Member St. Louis Medical Society)
Bauer, Robert A., St. Louis
Baum, Frank E., Kansas City
Bauman, Henry C., Maryville
Baumann, A. R., Steelville
Baumgarten, Walter, Jr., St. Louis
Baumhardt, Edward E., Kansas City
Baur, Alfred K., Fulton
Bawell, Malcolm B., St. Louis
Bay, Merrill R., Blue Springs
Beal, Homer, Malden
Beam, Sim F., St. Louis
Beare, J. Byron, St. Louis
Beare, Lucia V., St. Louis
Beasley, L. Kenneth, St. Louis
Beck, Leroi, St. Joseph
Beck, Paul M., St. Joseph
Becke, William G., St. Louis
Beckemeyer, W. Albert, Sedalia
Becker, Bernard, St. Louis
Becker, Edward J., St. Louis
Becker, George H., St. Louis
Becker, Richard R., Kansas City
Becker, Stanley C., St. Louis
Beckett, Theodore C., Boonville
Beckette, Edmund S., St. Louis
Beckman, Donald E., St. Louis
Beckman, Paul H., Nashville, Tenn.
(Member South Central Counties Medical Society)
Beckman, William, Strasburg
Bee, James E., Kansas City
Beecher, Sheldon B., Poplar Bluff
Beers, Ellsworth G., Seymour
Behrens, Donald T., Richmond Heights
Belden, Edgar A., Jefferson City
Belew, Joe E., St. Louis
Belinson, Louis, Jefferson City
Bell, Charles T., Maryville
Bell, Robert M., St. Louis
Bell, William F., Lee's Summit
Bellomy, Bruce B., Springfield
Belot, Monti L., Parkville
Benincasa, Anthony V. St. Louis
Benjamin Durand, St. Louis
Bennett, James D., Kansas City
Bennett, Joseph D., Little Rock, Ark.
(Member Ozark Medical Society)
Bennett, Thomas T., St. Louis
Benoit, Hector W., Jr., Kansas City
Benson, Leo J., Jr., Kennett
Benson, Scott C., St. Joseph
Berard, Louis N., St. Louis
Berenson, Sheldon E., Kansas City
Berg, Leonard, St. Louis
Berg, Ralph, St. Louis
Berger, Edward J., St. Louis
Bergman, Hugo F., St. Louis
Bergmann, John F., St. Louis
Bergmann, Martin, St. Louis
Bergmann, Victor H., Kansas City
Bergner, Grace E., St. Louis
Berland, Harry I., St. Louis
Berman, Joseph P., St. Louis
Berman, William, St. Louis
Bernard, Harvey R., St. Louis
Berndsen, Gerard H., Rock Hill
Berney, Francis J., St. Joseph
Bernreiter, Michael, Kansas City
Bernstein, Aaron M., St. Louis
Bernstorff, Paul H., St. Louis
Berry, Guy N., Kansas City
Berry, John W., Clayton
Berry, Maxwell G., Kansas City
Berry, Paul T., Troy
Bersche, Bertram L., St. Louis
Berwald, Irwin I., St. Louis
Bess, William E., Sedalia
Best, Robert, Higginsville
Bettonville, Paul J., Jr., St. Louis
Bialock, Jane F., London, England
(Member St. Louis County Medical Society)
Bickel, Vern T., Lamar
Biggs, Fred J., Jr., Poplar Bluff
Biggs, Harry L., Raytown
Biggs, James B., Bowling Green
Bikales, Victor W., Kansas City

Bills, Marvin L., Kansas City
Bilsky, Nathan, St. Louis
Bindbeutel, Arthur H., St. Louis
Bindbeutel, Donald A., Webster Groves
Binder, Morton A., St. Louis
Bircher, John L., St. Louis
Birdsall, Thomas C., St. Louis
Birenbaum, Aaron, St. Louis
Birney, William P., Hannibal
Birsner, Frank H., Carthage
Birsner, Louis J., St. Louis
Bishop, Marion D., Florissant
Bishop, Mary M., Ferguson
Bisno, Daniel, St. Louis
Bivings, F. Gary, Columbia
Blache, J. Owen, St. Louis
Black, Don A., Kansas City
Black, Eugene C., Kansas City
Black, James M.. Carrollton, Ill. (Member St. Louis County Medical Society)
Black, Mervin H., Joplin
Black, Samuel P. W., Columbia
Blacklock, David E., King City
Blackman, Nathan, Kirkwood
Blackmore, Thomas A., Windsor
Blackwell, Charles W., Platte City
Blair, Vilray P., Jr., St. Louis
Blalock, Robert W., Marshall
Blalock, William N., St. Louis
Bland, Warren W., Vandalia
Blanke, Otto T., Joplin
Blankenship, Dale M., Ballwin
Blankenship, George W., Neosho
Bleyer, Adrien S., St. Louis
Blim, Richard D., Kansas City
Block, Arnold S., St. Louis
Bloom, William A., Fayette
Bock, Lux H., St. Louis
Bockelman, Clifford H., Brentwood
Boedeker, Roy V., St. Louis
Boemer, Lilburn C., St. Louis
Boger, James W., Sedalia
Boggs, Roy E., St. Louis
Bohne, William R., St. Louis
Bohnsack, Ralph W., Brookfield
Bohrer, Harry C., St. Louis
Boldizar, Albert G., St. Louis
Boldt, Thomas H., St. Louis
Boles, Clifford R., Clayton
Boley, James O., Kansas City
Bolgar Bertalan, Festus
Bolin, N. Venay, Kansas City
Bolinske, Robert E., Clayton
Bolton, Robert L., St. Louis
Bond, Leslie F., St. Louis
Bondurant, Bryce H., St. Louis
Bonebrake, MacDonald, Springfield
Bonfanti, Albert L., St. Louis
Bonney, Samuel C., Washington
Boody, Robert J., Kansas City
Boone, Daniel S., Kansas City
Boone, Richard F., Macclenny, Fla. (Member Butler-Wayne-Ripley County Medical Society)
Booth, Herbert R., Hamilton
Border, Charles T., Garland, Tex. (Member Jackson County Medical Society)
Bordy, Marvin D., Kansas City
Borenstine, Joseph, Kansas City
Bortnick, Arthur R., St. Louis
Boswell, John R., St. Louis
Boteler, George M., St. Joseph
Boughnou, Harvey P., Kansas City
Bourke, Timothy S., Kansas City
Boutros, Amin, Kansas City
Bowdern, Edward H., St. Louis
Bowdish, Palmer R., Marshall
Bowe, Edwin E., Jefferson City
Bowerman, Harold H., St. Louis
Bowersox, Warren A., St. Louis
Bowles, G. Robert, St. Louis
Bowles, Richard P., Liberty
Bowman, Melvin C., Neosho
Bowser, John F., Kansas City
Box, Earnest M., Springfield
Boyd, Arthur M., St. Louis
Boyd, George K., Kansas City
Bozzo, Raymond J., Washington
Bradford, John F., Kansas City
Bradley, Frank R., St. Louis
Bradley, Richard V., St. Louis
Bradshaw, W. D., Clinton
Brady, Charles H., Sedalia
Brady, Hugh S., Concordia
Brams, Jack B., Kansas City
Brand, Earl L., Webster Groves
Brandon, Walter L., Poplar Bluff
Brasher, Ben H., Lexington
Brasher, Charles A., Mt. Vernon
Braufman, Harvey S., St. Louis
Braverman, Abe E., Kansas City
Breid, Jacob, Trenton
Bremser, Harry L., St. Louis
Brennan, George A., St. Louis
Brennan, John A., Farmington
Brennan, Patricia A., St. Louis
Brennan, Raymond J., Chillicothe
Brennan, Robert A., St. Louis
Brennan, Robert V., Kirkwood
Brenner, Paul A., Owensville
Brereton, Robert L., Kirkwood
Brewer, Lake, Ridgeway
Brewster, Charlotte M., Kansas City
Bricker, Eugene M., St. Louis
Bridgens, James G., Independence
Bridges, James R., Kahoka
Briscoe, John R., Maplewood
Bristow, Robert B., St. Joseph
Brittingham, Thomas E., St. Louis
Brodeur, Armand E., Kirkwood
Bronson, Shael S., St. Louis
Brooke, Clement E., Columbia
Brookes, Henry S., Jr., St. Louis
Brookes, Robert D., St. Louis
Brookreson, Alton F., Poplar Bluff
Brooks, Arthur C., St. Louis
Brooks, John M., Springfield
Brother, George M., St. Louis
Broun, Goronwy O., St. Louis
Broun, Goronwy O., Jr., St. Louis
Brown, Adrian J., Kansas City
Brown, Alex L., Springfield
Brown, Daniel W., San Diego, Calif. (Member St. Louis Medical Society)
Brown, E. Eugene, St. Louis
Brown, Eugene R., University City
Brown, Frederick B., Aurora
Brown, Irwin S., Kansas City
Brown, James B., St. Louis
Brown, James L., St. Louis
Brown, James T., Springfield
Brown, John J., Fulton
Brown, Lyman D., Springfield
Brown, Robert S., Kansas City
Brown, Seymour, St. Louis
Brown, William S., St. Louis
Brownfield, Samuel T., Brookfield
Browning, S. Pearce, III, St. Louis
Brownsberger, Robert H., Appleton City
Broyles, Glen H., Kansas City
Broyles, Watkins A., Bethany
Bruce, Helen L., St. Louis
Bruce, James G., Jefferson City
Bruce, Leo A., Sikeston
Bruce, Paul C., Excelsior Springs
Brukardt, Diane, Columbia
Brumm, Lawrence W., Kansas City
Bruner, Claude R., Columbia
Bruner, Robert E., Kansas City
Bruns, Kenneth, St. Charles
Brust, Carl H., Mission, Kan. (Member Jackson County Medical Society)
Bryan, James H., Clayton
Bryan, William H., Jr., Kansas City
Bryan, William T. K., St. Louis
Bryant, William O., Hayti
Buckingham, William, Kansas City
Buckner, Robert C.. Kansas City
Buckthorpe, Thelma C., Sikeston
Budd, John J., Jr., St. Louis
Budil, Edward J., St. Louis
Budke, Harold A., Kansas City
Buehler, Carl T., Jr., Eldon
Buesseler, John A., Columbia
Bugg, Andrew F., Lordsburg, N. M. (Member Mineral Area County Medical Society)
Buhler, Victor B., Kansas City
Buie, Bruce R., Kansas City
Bulger, Harold A., St. Louis
Bull, Ben M., Ironton
Bumgarner, James E., Columbia
Bumgarner, Roger W., Columbia
Bunting, Williston P., Kansas City
Burch, John E., Joplin
Burcham, Tom R., Jr., Doniphan
Burford, Cyrus E., St. Louis
Burford, E. Humber, St. Louis
Burford, Thomas H., St. Louis
Burke Robert J., St. Louis
Burkey, Jordan W., Springfield
Burkhardt, Edward F., St. Louis
Burmeister, R. William, St. Louis
Burney, Wallace S., Miller
Burns, Beryl I., Salt Lake City, Utah (Member Jackson County Medical Society)
Burns, Francis J., St. Louis
Burns, Francis R., Hannibal
Burns, Robert R., Fort Worth, Tex. (Member Jackson County Medical Society)
Burns, Thomas J., Houston
Burns, Thomas W., Columbia
Burnside, Charles R., Kirkwood
Burst, Donald O., St. Louis
Burstein, Robert, St. Louis
Busch, Anthony K., St. Louis
Busiek, Paul J., Springfield
Busiek, Urban J., Springfield
Bussmann, Donald W., Clayton
Butcher, Harvey R., Jr., St. Louis
Butcher, Robert W., Kansas City
Butler, E. F., St. Joseph
Butterworth, Nelson S., Kansas City
Butts, James D., Rolla
Byars, Louis T., St. Louis
Byers, Philip L., Kansas City
Byland, Benjamin F., Maryville
Byland, Samuel J., Wellsville
Byrne, John E., St. Louis

C

Caciolo, Carlo, St. Louis
Cacioppo, Joseph E., St. Louis
Cadice, John B., St. Louis
Caffrey, Raymond J., Grandview
Cain, Alvin R., Lamar
Cain, Charles F., Caruthersville
Caldwell, Jacob D., Hayti
Caldwell, John K., Kansas City
Calise, Peter J., Columbia
Calkins, Delevan, St. Louis
Callahan, Donald E., Jennings
Callaway, Guy D., Springfield
Callaway, Guy D., Jr., Springfield
Callaway, Luther M., Kansas City
Callihan, Charles F., West Plains
Calman, Carl H., St. Louis
Calodney, Martin M., St. Louis
Calovich, Emery R., Kansas City
Calvert, Lewis C., Weston
Camel, H. Marvin, St. Louis
Campbell, Cecil S., St. Louis
Campbell, Edward D., Cape Girardeau
Campbell, Frederick B., Kansas City
Campbell, James E., Macon
Campbell, John G., Kansas City
Campos, Francisco J., St. Louis
Canella, John M., Hannibal
Canepa, Francis J., St. Louis
Canepa, John B., St. Louis
Canlas, Emilio M., Poplar Bluff
Cannon, Edward M., St. Louis
Cannon, William J., St. Louis
Canty, Eugene J., St. Charles
Capetti, Alex P., Crane
Cappel, Powel B., St. Louis
Caravelli, Anthony F., St. Louis
Carbaugh, Glenn C., Kansas City
Carleton, Charles E., Jr., Farmington
Carlin, Albert L., Stanberry
Carlin, M. Richard, St. Louis
Carlisle, John B., Sedalia
Carlson, Arne E., St. Johns
Carlson, Hjalmar E., Kansas City
Carmichael, Francis A., Jr., Kansas City
Carney, Joseph E., Jr., St. Louis
Carney, Roscoe P., St. Louis
Carpenter, George T., St. Joseph
Carpenter, George W., Chillicothe
Carpenter, Wallace, Rock Port
Carr, Archie D., St. Louis
Carrier, Edson C., Kansas City
Carrington, Howard W., Lebanon
Carroll, George A., St. Louis
Carroll, Grayson, St. Louis
Carroll, Percy J., Clayton
Carroll, Thomas W., Lamar
Carron, Joseph F., Festus
Carron, Oscar A., Perryville
Carter, Edwin E., St. Louis
Carter, Howard, Hamilton
Carter, James R., Neosho
Carter, William W., Clayton
Caruso, Anthony A., Kansas City
Casady, Gilbert N., Prairie Village, Kan. (Member Jackson County Medical Society)
Casebolt, Buford T., Kansas City
Casebolt, Milton B., Kansas City
Casey, Shederic A., Lebanon
Casford, Ralph S., Kansas City
Cash, Charles R., Kennett
Cason, Elbert H., St. Louis
Cassel, Melvin A., St. Louis
Castelaw, Rush E., Kansas City
Catanzaro, Anthony F., St. Louis

Catanzaro, Francis J., Las Vegas, Nev.
(Member St. Louis Medical Society)
Catanzaro, Rudolph E., St. Louis
Cavaness, Ernest W., Leucadia, Calif.
(Member Jackson County Medical Society)
Centner, Paul J., Kansas City
Chalkley, Judson I., Columbia
Chamberlain, Gilbert L., Boonville
Chambers, James Q., Jr., Kansas City
Chamness, James T., St. Louis
Chandler, Orville B., New Madrid
Chandler, Robert A., Kansas City
Chapman, Arthur H., Kansas City
Chapman, Jean A., Cape Girardeau
Chapman, Jerry R., Steele
Chapman, Samuel B., Kansas City
Charles, Benjamin H., St. Louis
Charles, Cecil M., Clayton
Charnas, Raymond M., St. Louis
Chastain, Charles W., Farmington
Chastain, Maurice W., N. Kansas City
Cheng, Alfred K., San Francisco, Calif.
(Member Jackson County Medical Society)
Cherre, Anthony J., St. Louis
Cherre, Charles J., St. Louis
Chesney, George W., Joplin
Chiarottino, Joseph F., St. Joseph
Chiasson, E. Chaille, Columbia
Chieffi, Margaret, St. Louis
Chiles, David R., Smithville
Chinsky, Murray, St. Louis
Christ, Martin H., St. Joseph
Christensen, Roger F., Louisiana
Christy, Raymond A., Springfield
Chute, W. Deward, Moberly
Ciampa, Thomas, St. Louis
Ciapciak, Stanley J., St. Louis
Cibis, Paul A., St. Louis
Clancy, James F., St. Louis
Clark, Chester L., Trenton
Clark, Clarence L., St. Louis
Clark, Harold B., Venice, Calif.
(Member Jackson County Medical Society)
Clark, Irving H., Hickman Mills
Clark, James F., St. Louis
Clark, Kendall Allen, Jefferson City
Clarke, Michael J., Springfield
Clary, William F., Springfield
Clasen, Arthur C., Miami Beach, Fla.
(Member Jackson County Medical Society)
Clawson, James W., Springfield
Clay, Hampson S., Poplar Bluff
Clayton, Edgar L., Springfield
Cleary, Frank, St. Louis
Cleveland, Horace F., Long Beach, Calif.
(Member St. Louis Medical Society)
Cline, Edward W., Poplar Bluff
Cline, Harold H., Piedmont
Cline, Merle A., Kansas City
Clisham, John F., St. Louis
Clithero, William H., Duarte, Calif.
(Member St. Louis Medical Society)
Coates, Thomas A., St. Louis
Coburn, Donald F., Kansas City
Cochran, Donald, Columbia
Cochran, Jo R., Cape Girardeau
Cochran, Thomas E., Jr., Springfield
Cochrane, Joseph J., Kansas City
Cockerell, Sanford F., Independence
Coffee, Amos L., Willow Springs
Coffey, Ralph R., Kansas City
Coffin, Ernest L., Lakeworth, Fla.
(Member St. Louis Medical Society)
Coffin, Theodore A., Kansas City
Coffman, Esther E. L., Lakeworth, Fla.
(Member Ozarks Medical Society)
Cohen, Benjamin H., Clayton
Cohen, Frank, St. Ann
Cohen, Harry K., Kansas City
Cohen, Hilliard, Kansas City
Cohen, Louis, St. Louis
Cohle, Richard R.,Carthage
Cohnberg, Rosellen E., Monett
Cohrs, Clarence C., Moberly
Coil, Paul E., Mexico
Colbert, James W., Jr., St. Louis
Coldwater, Kenneth B., St. Louis
Cole, William R., St. Louis
Coleman, William G., St. Louis
Colglazier, Mary C., Kansas City
Coller, Frederick B., Springfield
Collins, Gretchen D., Macon
Collins, John M., St. Louis
Collodi, George A., Brentwood
Colom, George A., Kansas City
Comeau, Richard A., Dexter
Comens, Phillip, St. Louis
Comens, Ruth C., St. Louis
Commerford, James J., Crystal City
Commerford, John F., St. Charles
Compton, James R., Whittier, Calif.
(Member St. Louis County Medical Society)
Cone, Alfred J., Chesterfield
Connell, Evan S., Kansas City
Connor, Samuel W., Mountain Grove
Conover, Charles C., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Conrad, Adolph H., Jr., St. Louis
Conrad, Joseph A., Chillicothe
Conrad, Marshall B., Clayton
Conrad, Raymond C., Springfield
Cook, Jerome E., St. Louis
Cook, Ralph L., St. Louis
Cook, Oliver W., Caruthersville
Cook, Thomas B., Richmond
Cooke, James K., Jr., Address Unknown
(Member Pemiscot County Medical Society)
Cooper, Charles S., Kansas City
Cooper, Claude W., Thayer
Cooper, Henry T., St. Louis
Cooper, John H., Kansas City
Cooper, Lawrence E., Ft. Myers, Fla.
(Member Pemiscot County Medical Society)
Cooper, Leo F., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Cooper, Maurice E., Columbia
Cooper, R. Lee, Warrensburg
Cooper, Theodore, St. Louis
Cooper, Thomas J., St. Louis
Cope, James C., Columbia
Cope, Joseph S., Lexington
Copher, Glover H., St. Louis
Copp, Ralph, Jr., St. Louis
Cordonnier, Justin, St. Louis
Correnti, Nicholas A., St. Louis
Cortner, Mary C., Kansas City
Cossins, Carlos E., St. Joseph
Costa, Dominic V., St. Louis
Costello, Cyril J., St. Louis
Costello, Joseph P., St. Louis
Costello, Joseph P., Jr., Brentwood
Costen, James B., St. Louis
Costrino, John J., University City
Costrino, Joseph A., St. Louis
Coughlin, Bertrand D., St. Louis
Counsell, Chester M., Kansas City
Cowan, Robert D., Aurora
Cowan, Watt O., Greenfield
Cowdry, Edmund V., Jr., St. Louis
Cowherd, Joseph B., Kansas City
Cox, Kenneth E., Kansas City
Cox, Mary E., St. Louis
Cox, William A., Jefferson City
Cox, William L., Liberty
Coxe, William S., St. Louis
Craig, Irwin T., Joplin
Craig, Owen W. D., St. Joseph
Cramb, Arthur B., Lakeland, Fla.
(Member North Central County Medical Society)
Cramer, Quentin, Kansas City
Crawford, Archie L., Joplin
Crawford, Katherine J., University City
Crawford, Oral B., Springfield
Crawford, Robert M., Sullivan
Creditor, Morton C., Kansas City
Creech, Joseph C., Troy
Crego, Clarence H., Jr., St. Louis
Cremer, William J., Fulton
Cresswell, George F., Potosi
Crews, Robert N., Fulton
Crider, Russell J., St. Charles
Criscione, James R., St. Louis
Crispell, Lawrence S., Joplin
Critchlow, William C., Sikeston
Crites, Edward, Sedgewickville
Crocker, Albert M., Kansas City
Croom, Dorwyn W., Malden
Crosby, Alice S., Salem
Crossman, Robert W., Webster Groves
Crouch, F. Richard, Farmington
Crowe, John T., Cape Girardeau
Crowell, Hugh C., St. Louis
Crozier, Franklin A., Richmond
Culbertson, William F., Kansas City
Cullers, Charles H., Trenton
Cullum, Albert G. J., Middlesboro, Ky.
(Member St. Louis County Medical Society)
Cummings, James H., St. Louis
Cunningham, Darral D., Springfield
Curl, Howard, Joplin
Curran, Desmond, Kansas City
Curran, Edward J., Kansas City
Curran, George L., St. Louis
Curran, Kevin E., Kansas City.
Curts, Calvin J., Kansas City
Cutcliff, Daniel J., Kansas City
Cutler, Harold M., St. Louis
Cutler, Harry, St. Louis
Czebrinski, Edward W., St. Louis

D

Daake, John W., St. Louis
Dabbs, LeRoy, St. Louis
Dahms, Gustave, St. Louis
Daley, Frank R., Hamilton
Dalton, Arthur R., St. Louis
Daman, George A., St. Louis
Dames, Richard J., St. Louis
Damron, Edward O., Elsberry
Damron, Oscar H., Warrensburg
Danis, Peter G., St. Louis
Dankner, Arnold, Clayton
Dann, David S., Kansas City
Darnell, Thomas F. B., Columbia
Daughaday, William H., St. Louis
Daum, Harold F., Sedalia
Davault, George K., Richmond
Davidson, John D., St. Louis
Davidson, Morris, Clayton
Davie, Joseph, St. Louis
Davis, C. Braxton, Nevada
Davis, Edgar W., St. Louis
Davis, Frank L., St. Louis
Davis, Herbert V., Kansas City
Davis, Irl R., St. Louis
Davis, Jack M., Raytown
Davis, John J., Overland Park, Kan.
(Member Jackson County Medical Society)
Davis, Kenneth A., Kansas City
Davis, Landis Y., Canton
Davis, Leonard L., Jr., Mexico
Davis, Martin W., Webster Groves
Davis, Myron W., St. Louis
Davis, Paul C., Neosho
Davis, Robert C., Kansas City
Davis, Wilbur L., Charleston
Day, Anthony B., Marshall
Day, Cameron B., Kansas City
Day, Maxwell, St. Joseph
Deakin, Rogers, St. Louis
Dean, Francis D., Fayette
Dean, Lee W., Jr., Clayton
Decker, Albert I., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
DeGenova, Gerald H., Ste. Genevieve
DeHovitz, Bernard, St. Louis
Deitchman, Robert B., St. Louis
de la Torre, John J., Sullivan
Delzell, William A., Springfield
DeMaria, Peter F., Kansas City
Demko, Frank, St. Louis
Demko, William, St. Louis
DeMott, John, Kansas City
DeMotte, John A., Kansas City
Dempsey, David T., Kennett
Denk, Alan F., Indianapolis, Ind.
(Member St. Louis Medical Society)
Denney, Richard W., Mountain Grove
Dennie, Charles C., Kansas City
Denninghoff, James C., Columbia
Dennis, W. Paul, Flat River
Denny, Hubert M., Union
Denton, Levi D., Hayti
DePew, Heber B., St. Louis
Dernoncourt, John E., Charleston
DeTar, Burleigh E., Joplin
DeTar, B. E., Jr., Joplin
DeTar, George F., Joplin
Deutch, Max, St. Louis
Devine, John B., St. Louis
Devine, Joyce E., Boston, Mass.
(Member St. Louis Medical Society)
Deweese, Everett R., Kansas City
Dexheimer, Frank R., Columbia
Deyton, John W., St. Louis
Dickler, Donald J., St. Louis
Diekson, Frank D., Kansas City
Dieckman, William C., Dexter
Diehr, Alvin H., St. Louis
Diehr, Maurice A., St. Louis
Diekroeger, Manuel L., Boonville
Dietrich, Karl D., Columbia
Dietz, M. Wendell, Springfield
DiLeo, Senatro W., Jennings
Dill, Foster A., Maplewood
Dillard, Erin M., Springfield
Dills, Joseph N., Springfield

Dimond, Edgar A., McKinney, Tex.
(Member Greene County Medical Society)
Dinelli, Frank E., Poplar Bluff
Diveley, Rexford L., Kansas City
Dixon, John R., Brookfield
Dixon, Otto J., Kansas City
Dixon, Vewiser L., Kansas City
Dlabal, Luke J., Independence
Dmytryk, Eugene T., St. Louis
Doan, Deborah, Bakersfield
Doane, William L., Grandview
Dodd, Robert B., St. Louis
Dodge, Mark, Kansas City
Dodge, Milton, Kansas City
Doggett, Sylvester, Sikeston
Doherty, William R., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Doisy, Robert A., Glendale
Dolan, John T., Jr., St. Louis
Dolezal, Joseph B., Kansas City
Donahoe, James L., St. Louis
Donaldson, Robert C., St. Louis
Donley, Leo F., Jr., St. Louis
Donley, Robert R., Monett
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Dorris, Richard P., Jefferson City
Dorsch, Ervin H., Independence
Dorsett, E. Lee, Clayton
Doty, Roy J., Ada, Okla.
(Member Mid-Missouri Medical Society)
Doubek, John C., St. Louis
Doubek, John C., Jr., St. Louis
Douglass, Jesse E., Kansas City
Dowd, James F., Jr., St. Louis
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Downey, James W., Kansas City
Doyle, Charles R., St. Louis
Drace, Charles C., St. Louis
Drace, Charles C., Jr., St. Louis
Drace, James J., Cape Girardeau
Drake, Avery A., Rolla
Drake, Roy F., Kansas City
Drake, Truman G., St. Louis
Drake, William L., Jr., St. Louis
Draney, Thomas E., Kansas City
Drennan, James A., St. Louis
Drescher, Emmett B., St. Louis
Drews, Leslie C., St. Louis
Drey, Norman W., St. Louis
Dreyer, Carl J., Webster Groves
Dreyer, Philip V., Huntsville
Dripps, Roy C., St. Louis
Drisko, Robert M., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Drowns, Bruce V., Kansas City
Dryer, William F., Houston
Drum, Helen M. F. Aff, Clayton
Duane, George W., St. Louis
Dubuque, Theodore J., Jr., St. Louis
Duckworth, John K., Memphis, Tenn.
(Member Pemiscot County Medical Society)
Duden, Charles W., St. Louis
Duemler, John H., St. Louis
Duer, Mildred C., Kansas City
Duffy, Oliver F., Trenton
Duggan, John J., Jr., Kirkwood
Dulick, Michael, Brentwood
DuMont, Clement C., St. Joseph
DuMontier, R. J., O'Fallon
Dunaway, Howard A., Sikeston
Duncan, Ralph E., Kansas City
Duncan, Robert D., Springfield
Duncan, William H., Kansas City
Dunham, Robert H., North Kansas City
Dunham, Richard B., St. Louis
Dunleavy, James D., Kansas City
Dunmire, George Q., Kennett
Dunn, Robert E., St. Louis
Dunshee, Robert E., Maryville
Durnell, Monaford D., Lee's Summit
Durst, Henry, Fulton
Duval, Addison M., Jefferson City
Dworkin, Saul, St. Louis
Dwyer, Frank X., Kansas City
Dwyer, Hugh L., Kansas City
Dwyer, Reinhardt D., North Kansas City
Dwyer, Thomas L., Mexico
Dyer, Dallas J., St. Louis
Dyer, David P., Sedalia

E

Eades, Dee W., St. Louis
Eagleton, Mark D., Clayton
Earp, Ralph K., St. Louis
Ebel, Eugene H., St. Louis
Eber, Carl T., St. Louis
Eberle, John P., St. Louis
Eberle, Vincent L., St. Louis
Echterhoff, Harry R., St. Louis
Eck, Birkle, St. Louis
Ecker, Decider, Pacific
Eckert, Clarence T., St. Louis
Ecklund, Archibald M., Great Lakes, Ill.
(Member St. Louis Medical Society)
Ector, Henry J., Mexico
Edde, Clifford G., Kansas City
Edele, Eugene H., St. Louis
Edmonds, Devilla D., Kansas City
Edwards, D. R., Sedalia
Edwards, Francis L., Monett
Edwards, Joseph C., St. Louis
Edwards, Theodore F., North Kansas City
Edwards, Waldo B., Kirkwood
Efron, Joseph, Olivette
Eggers, George W. N., Jr., Columbia
Eggleston, Donald E., Macon
Egley, Loren E., St. Louis
Eidelman, Jack R., St. Louis
Eidmann, Walter P., St. Louis
Eigel, Edwin G., St. Louis
Eimer, Charles E., St. Louis
Eisemann, Gustave, Kansas City
Eisenmann, Benjamin P., New Haven
Eisenstein, Albert B., St. Louis
Eklund, Alfred W., Pleasant Hill
Elders, Frank A., Jr., Cuba
Eldridge, Charles J., Kansas City
Elias, David J., Independence
Eliscu, Juliette, Joplin
Elkins, Ronald F., Springfield
Eller, C. Howe, Clayton
Ellersieck, Dorothy M., St. Louis
Ellery, William L., LaGrange
Ellett, William H., Appleton City
Elliott, James R., Pasadena, Calif.
(Member Jackson County Medical Society)
Elliott, Raymond G., Kansas City
Elliott, Wade E., Kansas City
Ellis, Burnett E., Gideon
Ellis, Calvin C., St. Louis
Ellis, Dick G., St. Louis
Ellis, Elmer F., Kansas City
Ellis, Francis J., Springfield
Ellison, Leroy E., Maplewood
Ellsworth, Willard, Cainsville
Elrod, Dennis B., Cape Girardeau
Elser, Otto H., Independence
Elson, Julius, Ladue
Emerson, Reynolds L., Brentwood
Emmert, Fred, St. Louis
Engel, Lawrence P., Kansas City
Engelhardt, Robert C., Poplar Bluff
Engleman, Reinhold, St. Louis
English, Milton T., Jr., Kirksville
English, Wallace D., Cardwell
Engman, Martin F., Jr., St. Louis
Enloe, Lawrence D., Jefferson City
Enna, Carl D., Kansas City
Epp, George J., St. Louis
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Erlanger, Joseph, St. Louis
Ernst, Edwin C., St. Louis
Ernst, Edwin C., Jr., St. Louis
Ernst, Joseph G., Oakland
Ernst, Richard E., St. Louis
Ernst, Roland P., St. Louis
Eshelman, Albert D., Independence
Eskeles, Irwin H., St. Louis
Esker, George, Nevada
Esslinger, Arthur T., St. Louis
Estes, Albert M., Cape Girardeau
Estes, Jack M., Ferguson
Eto, Jackson, St. Louis
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, William R., Kansas City
Eubank, William Y., Kansas City
Evans, Alden M., Columbia
Evans, Ezra L., Jr., Springfield
Evans, Harry T., Branson
Eversoll, Norton J., St. Louis
Ewert, John O., Sedalia
Exon, C. Stuart, Jefferson City
Eyermann, Charles H., St. Louis
Eyermann, H. Walter, Warrenton

F

Fair, William L., Chillicothe
Fairchild, James F., Perryville
Fairshter, Alex E., St. Louis
Falk, O. P. J., St. Louis
Fallet, Charles E., DeSoto
Farley, Claude C., Kansas City
Farley, William M., St. Louis
Farney, Jacob P., Kansas City
Farnsworth, Jesse J., Kansas City
Farrar, Charles B., Cape Girardeau
Farrar, John T., Greenwich, Conn.
(Member St. Louis Medical Society)
Farrell, Robert J., St. Louis
Farris, William W., St. Louis
Farthing, Fred R., Springfield
Farthing, Gene W., Springfield
Feierabend, Frank L., Kansas City
Feind, Earl E., Rolla
Feinstein, Leon A., St. Louis
Feist, George V., Kansas City
Feldaker, Robert M., St. Louis
Feldman, David, Clayton
Feller, Charles E., Springfield
Feller, Harold H., St. Louis
Fellhauer, Carl M., St. Louis
Feltz, Lawrence W., Perryville
Ferguson, Donald S., Kansas City
Ferguson, James T., Kansas City
Ferguson, John P., Jr., Springfield
Ferguson, L. H., Jr., Joplin
Ferguson, Luther J., St. Joseph
Ferguson, Ralph, Joplin
Ferguson, Robert M., Webb City
Ferguson, Thomas B., St. Louis
Ferguson, Wilson J., Sikeston
Ferrara, John P., St. Louis
Ferrell, Thomas E., Jr., Springfield
Ferris, Carl R., Kansas City
Fessenden, Ersel M., Springfield
Finger, Donald H., St. Louis
Fingerhood, Marvin G., St. Louis
Fingert, Hyman H., St. Louis
Fink, LeRoy L., Edwardsville, Ill.
(Member St. Louis Medical Society)
Finkel, Barney W., St. Louis
Finkel, Robert H., Raytown
Finley, Freeman L., St. Louis
Finn, Murray E., St. Louis
Finnegan, Joseph V., St. Louis
Finney, William O., Chaffee
Fischer, Edward H., North Kansas City
Fischer, Erich, St. Louis
Fischer, Theodore, Altenburg
Fischer, Thomas J., Hannibal
Fish, Virgil O., St. Louis
Fisher, George E., Lebanon
Fisher, Joseph L., St. Joseph
Fisher, Stanley D., Sedalia
Fitch, C. H. Max, Springfield
FitzGerald, Leo P., University City
Fitzgerald, Robert H., Independence
Fitzgerald, William T., St. Louis
Flance, Israel J., St. Louis
Flanders, Horace F., Kansas City
Flanders, Virgil E., Kansas City
Flatley, John A., Raytown
Flavan, David B., St. Louis
Fleishman, Alfred, St. Louis
Fleming, J. Will, Jr., Moberly
Fleming, Paul D., Clayton
Fleming, Robert J., St. Charles
Fleming, Royall B., Kansas City
Fleming, Thomas S., Moberly
Fletcher, Paul F., St. Louis
Fletes, James W., St. Louis
Florian, Albert J., Kansas City
Flotte, Bernard H., St. Louis
Flotte, Sylvester A., St. Louis
Flynn, Edward P., St. Louis
Flynn, John T., St. Louis
Flynn, Joseph E., St. Louis
Flynn, Thomas T., St. Louis
Focht, Ralph H., Strafford
Folck, William P., Kansas City
Folkner, A. L., Warrensburg
Fong, Richard R., Oakland, Calif.
(Member Lincoln-St. Charles County Medical Society)
Ford, Lee T., Jr., St. Louis
Ford, Walter W., Gordonville
Foreman, Phillip B., Hannibal
Forgrave, John R., St. Joseph
Forgrave, Leon P., St. Joseph
Forman, George W., St. Joseph
Forman, Louis H., Kansas City
Forsen, James A., St. Louis
Forsman, Waldo W., Jr., St. Louis
Forster, Armand C., St. Louis
Forsyth, B. Todd, St. Louis

Forsythe, Robert W., Kansas City
Forti, John J., St. Louis
Foster, Howard M., St. Louis
Foster, Jack L., Desloge
Foster, Leon, St. Louis
Foster, Robert L., St. Louis
Fowler, Fred D., Kansas City
Fowler, I. Charles, North Kansas City
Fowler, James W., Kansas City
Fowler, Marvin L., West Plains
Fox, Leon J., St. Louis
Fox, Robert E., St. Louis
Frame, Homer G., Springfield
Francis, William C., Springfield
Francka, W. F., Hannibal
Franklin, Curtis U., Kansas City
Franklin, Harold A., St. Louis
Franklin, Max S., St. Louis
Fraser, Sydney A., St. Louis
Frazier, Robert L., Charleston
Fredeen, Robert C., Kansas City
Frederick, Raymond O., St. Louis
Freedman, Harold, St. Louis
Freedman, Ruth S., St. Louis
Freeman, David M., St. Louis
Freeman, Hal E., Springfield
Freeman, Robert F., Columbia
Freeman, Spencer L., Kirksville
Freiheit, Harold J., Ladue
Freimuth, L. E., St. Louis
Frein, Donald E., Leeton
Frerking, Herbert W., St. Louis
Freund, H. G., Fulton
Freund, Samuel J., St. Louis
Frick, John P., Kansas City
Friedman, Bernard, St. Louis
Friedman, Morris L., Kansas City
Friedman, Robert H., St. Louis
Friedrichs, Vernon D., Pilot Grove
Fries, Armand D., St. Louis
Fries, John W., St. Louis
Fries, William A., St. Louis
Friskel, Arthur K., St. Louis
Fritsch, Andrew J., St. Louis
Fritzlen, Thomas J., Kansas City
Froelich, Edwin J., St. Louis
Froelich, Rae W., Lebanon
Froelich, Robert E., Augusta, Ga.
(Member St. Louis County Medical Society)
Fryer, Minot P., St. Louis
Fuchs, George J., Creve Coeur
Fuchs, George J., Jr., Columbia
Fuhrman, Donald L., Kansas City
Fulkerson, Wilbur E., Higginsville
Fulks, Richard B., California
Fulton, Albert E., Kansas City
Funsch, Edwin C., St. Louis
Funsch, Robert E., St. Louis
Furla, Gus J., St. Louis
Furlow, Leonard T., St. Louis
Fuson, Levi H., St. Joseph
Fuson, William A., Trenton
Fuzzell, Jameso, Glendale, Ariz.
(Member Dunklin County Medical Society)

G

Gaebe, Harold C., Desloge
Gaffney, Caldwell J., St. Louis
Gafney, George T., St. Louis
Gaines, Quentin M., Kirkwood
Gainey, Harold L., Kansas City
Gale, Joseph F., Chillicothe
Gale, Philip R., St. Louis
Galeota, William R., Columbia
Gall, Ira, St. Louis
Gallagher, Lionel M., California
Gallagher, Neil I., St. Louis
Gandlmayr, Jack M., St. Louis
Ganley, William C., Kansas City
Gansloser, Maximilian W., St. Louis
Gansloser, Wilbert M., Clayton
Gantner, George E., Jr., St. Louis
Gantt, Ernest S., Jr., Mexico
Gantz, John A., Affton
Garcia, Charles L., Mexico
Gard, Raymond F., Independence
Gardner, Joseph W., Glasgow
Garfinkel, Bernard T., St. Louis
Garner, Lynn M., Jefferson City
Garrett, Glen H., Columbia
Garrison, Roy F., Kansas City
Garrison, T. W., Camdenton
(Member Mid-Missouri Medical Society)
Gary, George, Marceline
Gaston, Ralph E., St. Louis
Gaskins, John H., Kansas City
Gauer, Robert J., Kansas City
Gaunt, Frank P., Webster Groves
Gaunt, William D., Columbia
Gay, Elizabeth K., St. Louis
Gay, Elmer E., Richmond
Gay, George, Ironton
Gearhart, Merriam, Bethany
Gearhart, Wilbur H., St. Louis
Gedney, William B., Valley Park
Geha, Braham J., Kansas City
Geise, August W., Jr., Minneapolis, Minn.
(Member St. Louis Medical Society)
Gelperin, Abraham, Kansas City
Gempel, Paul A., Kansas City
Gentry, Enoch N., Jr., Kansas City
Gentry, Marvin C., Ava
Gentry, Merritt L., Springfield
German, Walter A., Jr., Springfield
Gernstetter, Sangwill L., Poplar Bluff
Gerst, Aloysius C., St. Louis
Gestring, Hugh A., Kansas City
Getelson, Joseph, Kansas City
Gibbons, Edward H., St. Louis
Gibson, David M., Kansas City
Gibson, Helen F., St. Louis
Gibstine, Marvin H., St. Ann
Gieselman, Ralph V., St. Louis
Giesler, Donald H., Osceola
Gildea, Edwin F., St. Louis
Gildea, Margaret C. L., St. Louis
Gilden, Jerome J., St. Louis
Gilkey, Harry M., Kansas City
Gillespie, Roy, Branson
Gillespie, William J., St. Louis
Gilliland, Oliver S., Kansas City
Gillmor, Charles S., Kansas City
Gilpin, Doris C., St. Louis
Ginsberg, Norman A., Kansas City
Gish, Rutledge, Fulton
Gissy, Charles J., St. Louis
Gist, William W., Kansas City
Gitt, Joseph J., St. Louis
Gladney, John H., St. Louis
Glascock, Donald W., Palmyra
Glaser, Martin J., St. Louis
Glass, William J., Jr., Monett
Glassberg, Bertrand Y., St. Louis
Glasscock, Ernest L., Kansas City
Glenn, Elmer E., Forsyth
Glennon, William P., St. Louis
Glick, Harry N., St. Louis
Glover, Kenneth, Mt. Vernon
Glynn, Robert R., Springfield
Gnade, Albert J., St. Louis
Goebel, Joan M., St. Louis
Goettman, William I., Ft. Walton Beach, Fla.
(Member St. Louis Medical Society)
Goldberg, Isadore E., Braymer
Goldenberg, Sidney, St. Louis
Goldenson, Max J., St. Louis
Goldfarb, Alvin, Olivette
Goldman, Alfred, St. Louis
Goldman, Hyman J., St. Louis
Goldman, Melvin L., St. Louis
Goldman, Stanley L., Kansas City
Goldring, Sidney, St. Louis
Goldsich, Edward, Kansas City
Goldstein, Marcy A., St. Louis
Gollub, Samuel W., St. Louis
Gomez, Cesar A., Jr., St. Louis
Gonser, Karl B., Sedalia
Gonzalez, Mario G., Warrensburg
Goodman, J. N., Glendale
Goodman, LeRoy, Kansas City
Goodman, Nathaniel, St. Louis
Goodrich, Harold A., Webster Groves
Goodson, William H., Liberty
Goodson, William H., Jr., Kansas City
Goolsbee, Robert L., Mission, Kan.
(Member Jackson County Medical Society)
Gordon, James S., Jefferson City
Gorelick, David F., Springfield
Gorham, Arwin E., St. Louis
Gorla, Wayne O., St. Louis
Gorrell, Ned B., Grandview
Gose, Don F. Springfield
Gottsch, Joseph C., Kansas City
Gowen, Leo F., St. Louis
Grabau, Gene H., St. Louis
Grable, James D., Portageville
Grabske, Charles F., Independence
Grabske, Charles F., Jr., Independence
Graeser, Richard G., Kirkwood
Graham, James W., Kansas City
Graham, Wallace H., Kansas City
Graneto, Joseph A., St. Louis
Grant, Claude S., St. Joseph
Grant, John M., St. Louis
Grant, Neville, St. Louis
Grant, Samuel B., St. Louis
Grantham, Samuel A., Jr., Joplin
Grauerholz, James W., Kansas City
Graul, Elmer G., St. Louis
Graul, Walter P., St. Louis
Graves, Arthur J., Mt. Vernon
Graves, F. Burton, Joplin
Gray, Walter C., St. Louis
Greaves, Eli A., Kansas City
Grebel, Clement B., St. Louis
Greditzer, Arthur S., St. Louis
Green, D. M., St. Louis
Green, John R., Independence
Green, John R., Independence
Green, Manuel E., St. Louis
Green, Robert S., Kennett
Green, Stanley L., Independence
Green, William R., St. Louis
Greenberg, Charles, Los Angeles, Calif.
(Member Buchanan County Medical Society)
Greene, Harry L., Hannibal
Greene, W. Wallace, Kansas City
Greenman, Marshall B., Clayton
Gregory, Ralph W., Kansas City
Gresick, Robert J., St. Louis
Griege, Charles W., Florissant
Griffin, Mary E. P., Buffalo
Griffin, Olin A., Jr., Buffalo
Griffith, John A., Jr., Kansas City
Griggs, James Y., St. Louis
Grim, Edward M., Kirksville
Grimes, Manning E., St. Joseph
Grindon, Joseph B., St. Louis
Griot, Albert J., St. Louis
Groce, George, Fulton
Grogan, Frank M., St. Louis
Gronau, Axel R., St. Louis
Grosskreutz, Joseph A., St. James
Grossman, Marvin, Fredericktown
Grove, Gulp W., Knobnoster
Growdon, John A., Kansas City
Grubb, Paul H., Joplin
Grueb, Paul M., St. Louis
Gruenfeld, Gerhard E., St. Louis
Grundmann, William H., St. Louis
Grybinas, Vytautas J., Belleville, Ill.
(Member St. Louis Medical Society)
Gubin, Alan S., Caruthersville
Guccione, Joseph B., St. Louis
Guffey, Don C., Kansas City
Guhleman, Henry V., Jr., Jefferson City
Guldner, Edmond, Lamar
Gulick, Charles R., St. Louis
Gullett, Charles C., Kansas City
Gum, William R., St. Louis
Gummels, Belmont B., St. Louis
Gundlach, Arthur, St. Louis
Gundle, Sigmund, Kansas City
Gunn, Jack, Versailles
Gunn, Richard W., Kansas City
Gunn, Walter T., St. Louis
Gurnee, Landon H., Jefferson City
Guze, Samuel B., Los Angeles, Calif.
(Member St. Louis Medical Society)
Gzell, Ronald, St. Louis

H

Hackmeyer, Rubin, St. Louis
Haddock, James N., Webster Groves
Haffner, Heinz, St. Louis
Hagan, Daniel J., St. Louis
Hagebusch, Omer E., St. Louis
Hagemann, Paul O., St. Louis
Haggen, Margaret E., Kansas City
Hahn, Andrew L., Springfield
Haight, John M., Kansas City
Haith, Walter F., Kansas City
Hale, Tyre H., St. Louis
Haley, Jack A., Goodyear, Ariz.
(Member Jackson County Medical Society)
Hall, Andy, Jr., St. Louis
Hall, David G., Columbia
Hall, David W., Springfield
Hall, Durward G., Springfield
Hall, Eugene W., Ferguson
Hall, Frank W., Cape Girardeau
Hall, Lee A., St. Louis
Hall, Marvin F., Joplin
Hall, Preston C., St. Louis
Hall, Robert A., St. Louis
Hall, Robert G., St. Louis
Hall, Thomas B., Kansas City
Halperin, Phillip H., Kansas City
Halpern, Lawrence K., St. Louis
Hamel, Herbert A., Kansas City
Hamill, Robert W., Kansas City
Hamilton, Caldwell K., St. Louis
Hamilton, Eugene G., Clayton
Hamilton, Eugene H., Joplin
Hamilton, William P., Aurora

Hamlin, Wyeth, Hannibal
Hammler, Christiana V., St. James
Hammond, John J., St. Louis
Hampton, Henry E., St. Louis
Hampton, Oscar P. Jr., St. Louis
Hampton, Stanley F., St. Louis
Hamtil, Edward W., St. Louis
Hanan, Ernest B., Springfield
Handler, Eric, St. Joseph
Handler, Fred P., Jefferson City
Handley, James M., Mission, Kan.
(Member Jackson County Medical Society)
Hanes, Lee D., Kansas City
Hanes, Robert L., Kansas City
Hanford, Wesley W., St. Louis
Hankin, Norman M., St. Louis
Hanlon, C. Rollins, St. Louis
Hanna, Richard E., St. Louis
Hans, Willard J., St. Louis
Hansbrough, Eugene T., Poplar Bluff
Hansel, French K., St. Louis
Hansen, Arthur L., Butler
Hanser, S. Albert, St. Louis
Hanser, Theodore H., St. Louis
Hanss, Armand W., Springfield
Hardacre, Ruth A., Kansas City
Hardesty, Joel W., Hannibal
Hardwicke, Henry M., Jefferson City
Hardy, Guerdan, Clayton
Hardy, Joseph A., Jr., St. Louis
Harell, Alex, St. Louis
Harford, Carl G., St. Louis
Harkins, William B., St. Louis
Harkness, Harry, Warrensburg
Harland, Robert E., Ironton
Harless, Morris S., Kansas City
Harmann, Martin F., St. Louis
Harms, Florian L., Salisbury
Harned, Bert W., Kansas City
Harner, Casper G., St. Joseph
Harper, Fleming B., St. Louis
Harrell, Henry J., Morrisville
Harrington, William J., St. Louis
Harris, Charles W., St. Louis
Harris, Hinman A., University City
Harris, Solon P., St. Louis
Harrison, Lee B., St. Louis
Harrison, Stanley L., St. Louis
Hart, Lawrence W., Kansas City
Hart, Martin M., Salem
Hart, Pearl V., Coatsville
Harting, Hugh R., St. Louis
Hartman, Paul T., St. Louis
Hartmann, Alexis F., St. Louis
Hartnett, Leo J., Clayton
Hartstein, Jack, University City
Hartwell, Basil O., Drexel
Hartwig, Frederick H., Kansas City
Hartwig, John A., St. Louis
Harwell, James L., Poplar Bluff
Harwell, J. Lester, Poplar Bluff
Hash, Emalyn H., Kansas City
Hashinger, Edward H., La Jolla, Calif.
(Member Jackson County Medical Society)
Haskell, Ralph E., Norborne
Hasselblad, Oliver W., New York, N. Y.
(Member North Central Counties Medical Society)
Hassett, Henry A., St. Louis
Hasson, Jack, St. Louis
Hasson, Robert, Moberly
Hata, Daikichi, Boonville
Hausheer, Herman J., Independence
Haw, Marvin T., Jr., Boone Terre
Hawk, Bray O., St. Louis
Hawker, William D., St. Louis
Hawkins, George L., Jr., St. Louis
Hawkins, Lee W., Clayton
Hayden, Loyola F., St. Louis
Hayek, Wesley E., St. Louis
Hayes, Lawrence L., Kansas City
Haynes, James W., St. Louis
Haynes, Lee, Kansas City
Haynes, Pugh, Jr., St. Louis
Haynes, Robert C., Marshall
Haynes, Solon E., Kansas City
Hazen, Robert M., Kansas City
H'Doubler, Francis T., Springfield
H'Doubler, Francis T., Jr., Springfield
Headrick, John A., St. Louis
Hecker, J. E., Jackson
Heeb, Max A., Sikeston
Heid, Lloyd L., St. Louis
Heideman, Alvah G., St. Louis
Heideman, Milo L., St. Louis
Heifetz, Carl J., St. Louis
Heinbecker, Peter, St. Louis
Helbing. Edward J., St. Louis
Heller, B. Marcus, Kansas City
Hellerstein, Stanley, Kansas City
Hellweg, Charles E., Mount Vernon
Helm, James O., New Florence
Helman, Richard G., Kansas City
Henderlite, John W., St. Louis
Hendin, Aaron, Olivette
Hendren, Glenn W., Liberty
Hengen, Henry E., Bridgeton
Henke, Charles F., St. Louis
Henke, Wilbert J., St. Louis
Hennelly, John J., St. Louis
Hendrickson, Hardin M., Poplar Bluff
Hendrickson, Hardin O., Poplar Bluff
Henry, Clarke L., Kansas City
Henry, Schubert D., Kansas City
Henschel, Eugene V., St. Louis
Hensley, Daniel R., Wardell
Herbert, Charles T., Cape Girardeau
Herman, Allen I., St. Joseph
Herman, Morris, St. Louis
Herrick, Harold C., La Grange
Herrman, George V., Kansas City
Hershey, Falls B., University City
Hertel, Albert L., St. Louis
Hess, Paul D., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Hetlage, Louis P., Troy
Heusler, Anton F., St. Louis
Heyer, Oscar C., St. Louis
Hibbard, Blaine Z., Kansas City
Hickerson, William H., Independence
Hickey, Robert F., St. Louis
Higgins, Robert S., Kansas City
Hilbert, Paul H., St. Louis
Hildreth, H. Rommel, St. Louis
Hill, Jack H., Kansas City
Hill, James E., Fulton
Hill, Jesse N., Independence
Hilton, Paul E., Kirksville
Hines, Arthur A., St. Louis
Hines, Paul, Kansas City
Hink, Frederick W., Independence
Hirsch, Albert, Vandalia
Hirsch, Joe E., Kansas City
Hite, Henry A., Green Ridge
Hobart, Carl A. B., St. Louis
Hobbs, Alonzo G., St. Louis
Hobbs, Earl B., Smithville
Hobbs, George H., Mount Vernon
Hobbs, John E., St. Louis
Hoctor, Emmett F., Farmington
Hodge, Robert H., North Kansas City
Hodges, Fred J., III, St. Louis
Hodgson, Frank H., Kansas City
Hoech, George P., Jr., St. Louis
Hoefer, Walter H. V., St. Louis
Hoelscher, Harold F., Warrenton
Hoeper, Samuel D., Kansas City
Hoffman, Jacob S., Kansas City
Hoffmann, Augustin D., St. Louis
Hoffmann, R. Lee, Kansas City
Hoffmann, Ronald E., St. Louis
Hofsommer, Armin C., Webster Groves
Hofstatter, Leopold, St. Louis
Hofstatter, Lilli, St. Louis
Hogan, Daniel F., Port Isabel, Tex.
(Member Jackson County Medical Society)
Hogan, Patrick C., St. Louis
Hogancamp, Charles E., St. Louis
Hogeboom, George W., Springfield
Hogg, Garrett S., Jr., Cabool
Hogue, Frank S., Kansas City
Holbrook, Charles K., St. Louis
Holdenried, William E., St. Louis
Holder, Thomas M., Kansas City
Holley, Donald B., Camdenton
(Member Mid-Missouri County Medical Society)
Hollingsworth, Ray S., Clinton
Hollis, Richard W., Springfield
Hollo, Vencel W., St. Louis
Hollweg, Kenneth C., Kansas City
Holman, Jurney H., Nacogdoches, Tex.
(Member North Central Counties Medical Society)
Holman, Melvin V., Kansas City
Holmes, David R., Springfield
Holscher, Edward C., St. Louis
Holt, Earl P., Jr., St. Louis
Holt, Waldo S., Kansas City
Holton, Edward B., Independence
Holtz, Alan S., Kirkwood
Holtzman, Samuel, Joplin
Homan, Joseph S., St. John's
Honich, Nicholas J., St. Louis
Hook, Waller G., Kansas City
Hooker, John H., St. Louis
Hooper, Robert N., Kansas City
Hoover, H. Lee, Jr., Springfield
Hope, James L., Lebanon
Hopkins, Florian G., Gideon
Hopkins, Thomas J., Sedalia
Hopkins, T. Spencer, Sedalia
Hornback, Edward R., Joplin
Horner, Glennon A., Marceline
Horner, John L., St. Louis
Horst, Otto C., Springfield
Horton, James D., Springfield
Horwitz, Irwin B., St. Louis
Hosto, Leland E., St. Louis
Houck, Russell M., Kecoughtan, Va.
(Member Clay County Medical Society)
Houston, Vincent T., St. Louis
Howden, Thomas L., St. Joseph
Howe, Albert L., St. Louis
Howe, Louis F., St. Louis
Howell, B. D., Brookfield
Hoxworth, Gerald M., Cape Girardeau
Hrdlicka, Victor E., St. Louis
Huber, Erwin T., St. Louis
Huber, Lasley E., Moberly
Huck, Frank F., Fenton
Huck, Richard F., St. Louis
Huckstep, Robert A., Farmington
Huey, Kenneth H., St. Louis
Huggins, Albert M., St. Louis
Hughes, Gerald E., Kansas City
Hughes, Judson M., St. Joseph
Hughes, Robert G., Creve Coeur
Hughes, Shelby B., Clinton
Hulbert, Bernard, St. Louis
Hummel, Anton J., St. Louis
Humphrey, Harvey A., St. Louis
Humphrey, James, Mound City
Humphreys, Edward T., Boonville
Hungate, Carroll P., Kansas City
Hunleth, Frank E., St. Louis
Hunt, Claude J., Kansas City
Hunt, John W., Jr., Leadwood
Hunt, Lloyd H., Salem
Hunt, William J., St. Joseph
Hunter, James R., Webster Groves
Hunter, Martin P., Kansas City
Hurst, Ben B., Lebanon
Hurst, Wilfred W., Joplin
Hurwitt, Frank, Kansas City
Husted, George W., Parma
Hutchinson, James H., Jr., St. Louis
Hutto, A. Herman, St. Louis
Hutton, Joseph L., St. Louis
Hyde, Lawrence L., Kansas City
Hyman, Anna, St. Louis
Hyndman, Charles E., St. Louis

I

Ide, Lucien W., St. Joseph
Imes, Clifford H., Lynwood, Calif.
(Member Ozarks Medical Society)
Imes, Elvin D., Maryville
Ingham, Walton C., Kansas City
Inkley, John J., St. Louis
Irick, Carl C., Webster Groves
Irland, Robert D., Kansas City
Irwig, Fred, Kansas City
Irwin, William F., Leasburg
Isbell, Charles H., Carthage
Isom, Waldo B., Knox City
Israel, Milton R., St. Louis
Ittner, George W., Jr., St. Louis
Ivy, Henry B., Springfield
Izmirlian, Grant, Webster Groves

J

Jackson, Robert L., Columbia
Jackson, Vernon B., Fulton
Jackson, William R., Kansas City
Jackson, William R., Maryville
Jacob, Walter P., Kansas City
Jacobs, Charles C., St. Louis
Jacobs, Frederick A., St. Louis
Jacobs, Morton, Shawnee Mission, Kan
(Member Jackson County Medical Society)
Jacobs, Walter H., Kansas City
Jaeger, Joseph N., Jackson
Jaime, Nicholas, Kansas City
James, Norman A., St. Louis
James, Otis E., Jr., Kansas City
James, William M., St. Louis
Jameson, James E., Springfield
Janney, James G., Jr., Clayton
Jansen, Robert, Kansas City
Jarvis, Garth L., St. Louis
Jarvis, James A., Kansas City
Jaudon, Joseph C., Clayton
Javaux, Everett J., St. Louis
Jean, J. Ted, St. Louis
Jeans, Virgil, Joplin

Jeffries, Robert C., Kansas City
Jenkins, Paul A., Lebanon
Jennett, Harry N., Kansas City
Jennett, James H., Kansas City
Jennings, Ethlyn C., North Kansas City (Member Platte County Medical Society)
Jensen, Joshua E., St. Louis
Jick, Sidney, St. Louis
Johns, George A., Pikesville, Md. (Member Saline County Medical Society)
Johns, Leo E., Kansas City
Johnson, C. Laurence, Kansas City
Johnson, Charles R., San Diego, Calif. (Member Marion-Ralls-Shelby County Medical Society)
Johnson, Charles S., Warrensburg
Johnson, David S., St. Louis
Johnson, Earl W., Cape Girardeau
Johnson, Edward M., Ft. Campbell, Ky. (Member Chariton-Macon-Monroe-Randolph Counties Medical Society)
Johnson, Ferrell H., Lebanon
Johnson, Frank C., Doniphan
Johnson, George L., San Francisco, Calif. (Member Greene County Medical Society)
Johnson, Grover C., Marthasville
Johnson, James S., Kansas City
Johnson, Joseph E., Hickman Mills
Johnson, Mitchell D., Ferguson
Johnson, Q. Ray, Jr., Gadsden, Ala. (Member Pike County Medical Society)
Johnson, Richard E., Columbia
Johnson, Roy, Ferguson
Johnson, Thomas M., Kansas City
Johnson, Warford B., Springfield
Johnson, William A., Kansas City
Johnson, William F., Springfield
Johnston, Joseph L., Springfield
Johnstone, John, Jr., Kirkwood
Johnstone, Paul N., Kansas City
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Jonas, Harry S., Jr., Independence
Jones, Andrew B., St. Louis
Jones, Augustin, St. Louis
Jones, Dorothy J., Clayton
Jones, Edward E., Lilbourn
Jones, Edward S., Harrisonville
Jones, George H., Kansas City
Jones, Grey, St. Louis
Jones, James B., Brentwood
Jones, John B., Kirksville
Jones, Keith D., Warrensburg
Jones, Otey S., St. Louis
Jones, Ralph H., Rochester, Minn. (Member Saline County Medical Society)
Jones, Richard A., St. Louis
Jones, Theodore R., Kansas City
Jones, Victor, Brentwood
Jones, Vincent L., St. Louis
Jordan, Edward J., St. Louis
Jordan, Walter R., St. Louis
Jorstad, Louis H., St. Louis
Joseph, Harold Jerome, Ladue
Joseph, Samuel R., Tucson, Ariz. (Member St. Louis Medical Society)
Joslyn, Harold L., St. Louis
Jost, Charles A., St. Louis
Jotte, Richard F., St. Ann
Juden, Alexander G., Cape Girardeau
Judge, Walter T., Crystal City
Judy, Joseph D., Ferguson
Jung, J. Marshall, Illmo
Justus, John B., Kansas City

K

Kahn, Lawrence, St. Louis
Kallenbach, Glen P., Mexico
Kamakas, Nicholas, Ferguson
Kanogowa, Hajime H., Jefferson City
Kane, Clyde E., St. Louis
Kantor, Julius M., Kansas City
Kantor, Samuel, Kansas City
Kaplan, Albert, St. Louis
Kappesser, Netajean B., St. Louis
Kappesser, Roland C., St. Louis
Karandjeff, Apostle D., St. Louis
Kardesch, Milton, St. Louis
Karl, Michael M., St. Louis
Karraker, Alvan G., Farmington
Karsh, Robert S., University City
Kartus, Irving, Kansas City
Kaskie, Clifford R., Clayton
Kasten, Melvin C., Cape Girardeau
Katz, Milton, Kansas City
Kauffman, Ruth, Versailles
Kaul, Philip G., Kansas City
Keairnes, Harold W., Independence
Kealhofer, George C., Kansas City
Keats, Theodore E., Columbia
Keeble, Charles B., St. Louis
Keeler, James E., Kansas City
Keenoy, John J., St. Louis
Keffler, Karl L., St. Louis
Kehoe, John J., St. Louis
Keim, John H., Cape Girardeau
Keim, John P., St. Louis
Keller, Joseph M., St. Louis
Keller, Louis, St. Louis
Keller, Maurice J., St. Louis
Keller, Robert M., Wentzville
Kellett, John G., Webster Groves
Kelley, Gilbert B., Savannah
Kelley, Isaac D., Jr., St. Louis
Kelley, Ralph R., Savannah
Kelley, Robert W., St. Louis
Kelley, Walter L., Affton
Kelling, Douglas G., Waverly
Kelling, Jordan, Waverly
Kelly, Eugene H., Kansas City
Kelly, Marshall W., Jefferson City
Kelly, R. Emmet, St. Louis
Keltner, Raymond O., Raytown
Kemme, Richard J., St. Louis
Kendall, Charles A., Independence
Kendis, Joseph B., St. Louis
Kennard, George K., Kansas City
Kenney, Roy E., Neosho
Kent, Bela K., Kansas City
Kent, Clifford F., Kansas City
Keown, Kenneth K., Columbia
Kepler, Earl C., Fulton
Kerr, David N., St. Louis
Kerr, Frank T., Monett
Kerr, Russell, Kansas City
Kessler, Joseph J., St. Louis
Ketcham, William M., Kansas City
Ketron, Marvin B., Kansas City
Kettelkamp, George D., St. Louis
Ketterman, Grace H., Hickman Mills
Ketterman, Herbert L., Kansas City
Kettner, Edward G., Kansas City
Key, James S., Springfield
Kendig, John H., St. Louis
Keyes, Edward L., St. Louis
Kibbe, Edgar A., California
Kieber, Robert W., St. Joseph
Kieffer, Roland S., St. Louis
Kieffer, Victor B., Jr., St. Louis
Kiehl, Katharine, Joplin
Kienberger, Paul A., Kansas City
Kiene, Richard H., Kansas City
Kienzle, Edward C., St. Louis
Kilker, Clarence H., St. Louis
Kilker, Donald E., St. Louis
Kimball, Merritt H., Kansas City
Kimberlin, Herbert C., Trenton
Kimelman, Nathan, St. Louis
Kimes, Ira D., Cameron
Kinder, James A., Cape Girardeau
King, Elbert R., Boise, Idaho (Member West Central Missouri Medical Society)
King, Eustace E., III, St. Louis
King, Francis C., Kirkwood
King, J. Tenbrook, Kansas City
King, James P., St. Louis
King, John V., St. Louis
King, Morris K., St. Louis
King, Richard H., Clinton
King, Samuel J., St. Louis
King, Walter R., Kansas City
Kingsbury, Helen, Shawnee Mission, Kan. (Member Jackson County Medical Society)
Kingsland, Robert C., Clayton
Kinner, Helmuth M., St. Louis
Kinsella, Edward D., St. Louis
Kinsella, Maria S., St. Louis
Kinsella, Peter W., St. Louis
Kinsella, Ralph A., St. Louis
Kinsella, Ralph A., Jr., St. Louis
Kipnis, David M., St. Louis
Kirk, Charlie W., Hopkins
Kirschman, Robert E., Joplin
Kirstein, Melvin B., St. Louis
Kirtz, Louis P., Clayton
Kiser, David M., Kansas City
Kissane, John M., St. Louis
Kister, George E., St. Charles
Kistner, Robert L., Travis Air Force Base, Calif. (Member St. Louis Medical Society)
Kistner, William F., St. Louis
Kitchen, William M., Kansas City
Klaff, Daniel D., St. Louis
Klebba, Larry B., Jefferson City
Klein, Andrew G., St. Louis
Klein, Arnold G., St. Louis
Klein, Bert H., St. Louis
Klein, Edward H., Kansas City
Kleinschmidt, Clinton, St. Louis
Klenk, Charles L., St. Louis
Klepinger, Dayton P., Kansas City
Klinge, Frederick W., St. Louis
Klingner, George M., Springfield
Klippel, Allen P., St. Louis
Klippel, Bernhardt W., St. Louis
Kloecker, Herman J., St. Louis
Kloeppel, Carl F., Kirkwood
Klym, Nicholas, St. Louis
Knabb, Arthur D., Springfield
Knabb, Harris, Springfield
Knabb, Henry F., Coral Gables, Fla. (Member Greene County Medical Society)
Knabb, Henry F., Jr., Springfield
Knabb, Kenneth E., Springfield
Kneal, E. Ellsworth, St. Louis
Kneibert, Fred L., Poplar Bluff
Knepper, Paul A., St. Joseph
Knese, Luke A., St. Louis
Knight, Franklin P., St. Louis
Knight, John S., Kansas City
Knight, Lyle B., Lee's Summit
Knight, William A., Jr., St. Louis
Knipschild, B. F., Marshall
Knoch, H. Kermit, Kansas City
Knock, Henry L., Kirkwood,
Knoke, Frederick W., Jr., St. Louis
Knowlton, Norman P., Jr., St. Louis
Knox, Earl R., Kansas City
Koch, Robert E., Clayton
Koehler, Charles A., Kansas City
Koehler, John W., Joplin
Koenig, George H., St. Petersburg, Fla. (Member St. Louis Medical Society)
Koenig, Karl F., St. Louis
Koerner, Kenneth A., Clayton
Koessel, Arthur W., St. Louis
Kohler, Eugene J., St. Louis
Kohler, Louis H., St. Louis
Kohn, Cecil M., Kansas City
Kolze, Vernon W., Springfield
Komanetsky, William M., St. Louis
Konzelmann, John A., St. Louis
Koon, Ben, Bolivar
Kopp, Jules H., St. Louis
Kopp, Leonard J., St. Louis
Koppenbrink, Walter E., Jr., Higginsville
Korn, Robert L., Clayton
Korth, William M., Kansas City
Kotner, Lawrence M., St. Louis
Kountz, William B., St. Louis
Koutsoumpas, William V., St. Louis
Kowert, Edward H., St. Louis
Kozal, Francis L., Crystal City
Kozlowski, Albert E., St. Louis
Kraft, Edward O., Brentwood
Kraft, Jacob, Kansas City
Kramer, Fred, St. Louis
Kramolowsky, Helmuth H., St. Louis
Kraner, Justin F., St. Louis
Kranson, Seymour J., Independence
Kratz, Frederick W., Liberty
Kratz, Paul E., Cape Girardeau
Krebs, Joseph M., Clayton
Krebs, Otto S., St. Louis
Krieger, John L., St. Louis
Kromer, Charles, St. Louis
Kubin, Milford T., Columbia
Kubitschek, Paul F., St. Louis
Kuebrich, Thomas C., Ferguson
Kuenzi, Donald E., North Kansas City
Kuhn, John R., Jr., Joplin
Kuhn, William F., II, Kansas City
Kulowski, Jacob, St. Joseph
Kurth, Robert K., St. Louis
Kutryb, Walter J., St. Louis
Kurz, Rudolph F., St. Louis
Kuttner, Marianne, St. Louis
Kyger, Fred B., Kansas City
Kyger, John E., Kansas City
Kyner, Thomas A., Kansas City

L

Lachance, Leopold, Centralia
Laey, N. Eugene, Kansas City
Ladd, Charles B., St. Louis
Ladenson, Roland P., Columbia
LaDriere, Raymond J., St. Louis
Laffoon, France L., Vista, Calif. (Member Jackson County Medical Society)
LaHue, Lilburn D., Butler
Lakes, John D., Litchfield, Ill. (Member St. Louis Medical Society)

Lally, James J., Kansas City
Lam, Robert L., St. Louis
Lamar, Robert F., Kansas City
Lamb, Wanda, St. Louis
Lambert, Marian, Kansas City
Lamke, Charles M., Columbia
Lamson, Roy C., Neosho
Lamy, John E., Sedalia
Landau, Daniel B., Hannibal
Landau, William M., St. Louis
Landis, George K., Kansas City
Landor, John H., Columbia
Landree, James C., St. Louis
Lane, Clinton W., St. Louis
Laney, Ronald L., Carlsbad, Calif.
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Lang, John J., St. Louis
Langan, William J., Jr., St. Louis
Lange, Adolph C., St. Louis
Langeluttig, Harry V., Mount Vernon
Langhus, Melvin O., North Kansas City
Langston, Walter R., Springfield
Lanier, Earl W., St. Louis
Laning, J. Halcombe, Kansas City
Lankford, Harold D., Mexico
Lanning, Richard C., Ste. Genevieve
Lanning, Robert J., Hannibal
Lansche, Elmer A., St. Louis
Lansche, W. Edward, St. Louis
Lapi, Angelo, Kansas City
Lapi, Ruth M., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Lapp, Harry C., Kansas City
Larimore, Joseph W., St. Louis
Larkin, Rosemary R., St. Louis
Larsen, Kenneth V., St. Louis
Larson, Paul U., St. Louis
LaSalle, Michael W., Kansas City
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Lassar, Gilbert N., St. Louis
Latham, Kenyon S., California
Latham, Raymond W., Kansas City
Latimer, Walter N. A., Hannibal
Lattinville, Henry E., St. Louis
Lau, Gustav A., St. Joseph
Laurenzana, Frank P., Kansas City
Lawless, Charles L., Marshall
Lawrence, George H., St. Louis
Lawrence, John R., Marshall
Lawton, John T., St. Louis
Lawton, Lawrence M., St. Louis
Lawton, Thomas P., St. Louis
Layton, Ira C., Kansas City
Leahy, John G., Clayton
LeBlanc, Leo J., St. Louis
Lederer, Charles M., Warrensburg
Lederman, Joseph, St. Louis
Lee, Carleton H., St. Joseph
Lee, George C., Kansas City
Lee, Gerald B., Ft. Carson, Colo.
(Member St. Louis Medical Society)
Leech, Charles A., Columbia
Leech, Maurice P., Fayette
Legner, Stanley G., Perryville
Lehner, Richard L., Kansas City
Leidinger, Karl J., Republic
Leifer, William W., Kansas City
Leightner, William, St. Louis
Leitch, Cecil G., Blue Springs
Leitz, Frank B., Kansas City
Lembech, Joseph A., St. Louis
Lemmon, George B., Springfield
Lemmon, G. Bruce, Jr., Springfield
Lenobel, Milton I., Clayton
Lentz, Clark H., Kansas City
Lentz, Harold C., Neosho
Leo, William A., Kansas City
Leonhardt, Erwin M., St. Louis
Lerman, George S., St. Louis
Lerner, Abe F., Clayton
Lerwick, Everett R., St. Louis
Leslie, Charles H., Kirkwood
Leslie, James F., Springfield
Leslie, J. Paul, Jefferson City
Leslie, James T., Jefferson City
Levey, Harry B., Kansas City
Levey, Simon A., St. Louis
Levin, Marvin E., University City
Levin, Sidnev S., St. Louis
Levitt, Joseph, St. Louis
Levy, Irwin, St. Louis
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Lewin, Wilbur H., St. Louis
Lewis, Albert G., Smithville
Lewis, James E., Jr., St. Louis
Lewis, Ray B., Columbia
Lewis Revis C., Kansas City
Leydig, Stanley M., St. Louis
Lichtor, Alexander, Kansas City
Lichtor, Joseph M., Kansas City
Lichty, Charles A., Shelbina
Lieb, Francis X., St. Louis
Lieb, Otto, St. Louis
Lieberman, B. Albert, Jr., Kansas City
Lieberman, David M., St. Louis
Liebmann Fritz M., St. Louis
Liese, Grover B., St. Louis
Liggett, Hiram S., St. Louis
Lilly, Terry E., Kansas City
Lilly, Terry E., Jr., Kansas City
Limbaugh Walter R., Ft. Myers Beach, Fla.
(Member Pemiscot County Medical Society)
Lindeman, Carl H., St. Louis
Lindquist, Carl N., Kansas City
Link, Alexander J., St. Louis
Link, Vance E., Independence
Linville, Howard E., Kansas City
Lipschitz, Ervin, Clayton
Lipsitz, Ellis S., St. Louis
Lischer, Carl E., St. Louis
Lissack, Edmund, Concordia
Liston, Odus, Oakgrove
Littauer, David, St. Louis
Little, Monroe H., St. Louis
Littmann, Lewis E., Clayton
Litton, Lyle D., Springfield
Litzow, Louis T., St. Louis
Lockhart, Charles E., Springfield
Lockhart, William G., St. Joseph
Lodwick, Gwilym S., Columbia
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen S., St. Louis
Loewy, Louise B., Kansas City
Logan, James A., Warsaw
Logue, John T., Columbia
Lohr, Curtis H., St. Louis
Lohr, Robert W., Florissant
Lohrentz, Lois H., Kansas City
Loitman, Bernard, St. Louis
Londe, Sol, St. Louis
London, Stanley L., St. Louis
Lonergan, Warren M., St. Louis
London, Stanley L., St. Louis
Long, Charles L., Jr., St. Louis
Long, David S., Harrisonville
Long, Forrest C., Savannah
Long, Frank B., St. Louis
Long, Frank B., Sedalia
Long, R. Stacy, Kansas City
Longenecker, Joe L., Joplin
Lonsway, Maurice J., St. Louis
Lonsway, Maurice J., Jr., St. Louis
LoPiccolo, Vincent J., St. Louis
Lord, Richard E., St. Louis
Lorenc, Ernest, Springfield
Lottes, James O., St. Louis
Loughead, John R., Poplar Bluff
Lourie, Herbert, Manlius, N. Y.
(Member St. Louis Medical Society)
Love, Drury M., Kansas City
Love, Robert W., Jr., Millington, Tenn.
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Love, Walter S., Nevada
Loving, B. Rush, Ballwin
Lovinggood, Thomas A., Cape Girardeau
Lowe, Alvin L., Sedalia
Lowe, Horace A., Springfield
Lowe, Horace A., Jr., Springfield
Lowell, Paul, Kansas City
Lowenstein, Paul S., St. Louis
Lowney, John F., Columbia
Lowrey, Ford J., Kansas City
Loyd, Earl L., Jefferson City
Loyd, Herlan O., Jefferson City
Lucas, Fred V., Columbia
Lucas, John H., Brookfield
Lucido, Joseph L., St. Louis
Lucke, Eugene M., Hannibal
Luckenbill, Paul T., Plattsburg
Luckey, Horace L., Maplewood
Luedde, Fullerton W., St. Louis
Luedde, Philip S., St. Louis
Luh, Andrew, St. Louis
Luke, Herbert K., St. Louis
Luman, Frank E., Edina
Lund, Herluf G., St. Louis
Lund, Robert H., Clayton
Lundgren, Fred H., Jr., Kansas City
Luppens, Albert F., Lee's Summit
Lurie, Harold H., Springfield
Lusk, Charles A., Jr., Butler
Luten, Drew W., St. Louis
Luter, Carter W., Butler
Lutkewitte, Joseph F., Ste. Genevieve
Lutz, Martin H., St. Louis
Lyddon, Harold R., Jr., Kansas City
Lyle, Ray M., Kansas City
Lyle, Robert R., Versailles
Lyman, Edward H., St. Louis
Lynxwiler, Chester P., St. Louis
Lytle, William R., Rolla
Lyttle, Garnet C., St. Louis
Lytton, George J., Kansas City
Lytton, William B., St. Louis

M

McAdam, Charles R., St. Louis
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McAlhany, Howard J., Springfield
McArtor, Thomas R., Browning
McBurney, Alexander A., Stockton, Calif.
(Member Saline County Medical Society)
McBurney, Charles A., Slater
McCall, Edwin L., Brentwood
McCalla, John P., Raytown
McCallum, Andrew J. C., Aurora
McCann, John F., St. Louis
McCann, Louis P., Nevada
McCanse, Raymond A., Kansas City
McCarroll, Henry R., St. Louis
McCarthy, Eugene F., St. Louis
McCarthy, John M., St. Louis
McCarthy, Thomas D., Ferguson
McCarthy, William F., Blue Springs
McCaughan, John M., St. Louis
McClanahan, Robert C., Kansas City
McCloskey, R. Bruce, Webster Groves
McClure, David N., Clayton
McClure, Thomas C., Sikeston
McConchie, James E., Independence
McCorkle, E. Lee, Marshall
McCormick, James E., Kansas City
McCoy, Frederick J., Kansas City
McCoy, Warren R., Caruthersville
McCracken, Samuel R., Excelsior Springs
McCraw, Doyle C., Bolivar
McCubbin, Clarence R., Kansas City
McCollough, Campbell C., Kansas City
McCollough, Lawrence N., St. Louis
McCunniff, William B., Kansas City
McDaniel, John R., St. Joseph
McDermott, Alfred E., Perryville
McDonald, Bruce P., Kansas City
McDonald, Eugene F., Jackson
McDonald, George H., St. Louis
McDonald, Terrence J., Poplar Bluff
McDonald, Victor G., Jr., Kansas City
McDonald, Wilbur P., St. Joseph
McDonnell, John F., Kansas City
McDowell, Frank, St. Louis
McElroy, Glenn L., Columbia
McElvain, Robert C., St. Louis
McFadden, Gene A., Clinton
McFadden, James F., St. Louis
McFadden, James F., Jr., St. Louis
McFarland, Morris D., Kansas City
McGannon, Paul T., Kansas City
McGinnis, Byron J., St. Louis
McGinnis, William F., Clayton
McGinty, Charles P., Cape Girardeau
McGlothlan, Arthur B., St. Joseph
McGuire, Thomas H., Kansas City
McHale, Thomas C., Kansas City
McHaney, John W., Jefferson City
McIntire, Emery J., Carthage
McIntyre, John D., Kansas City
McKaskle, Clarence W., Caruthersville
McKee, Joseph W., Kansas City
McKee, Oliver A., Kirkwood
McKee, Wallace P., Kansas City
McKinstry, Karl V., De Soto
McKnelly, William V., Jefferson City
McLain, B. M., Poplar Bluff
McLean, Harry A., St. Louis
McLean, Royal C., Kirkwood
McLelland, Richard I., St. Louis
McLeod, John, Kansas City
McMahan, John H., St. Louis
McMahon, Alphonse, St. Louis
McMahon, Bernard J., Clayton
McManamon, Thomas V., Florissant
McMillan, Thomas E., Kansas City
McMurray, Herbert C., Ballwin
McNalley, Frank P., Clayton
McNalley, Michael, St. Louis
McNamara, John J., Richmond Heights
McNamee, William F., St. Louis
McNearney, Joseph, St. Louis
McNeel, Lee A., Jr., Greenfield
McNew, William T., Carthage

McPhee, William R., Kansas City
McPheeters, James W., Poplar Bluff
McPherson, Owen P., Grandview
McPike, Lloyd H., Joplin
McSwiney, John G., St. Louis
McVay, James R., Kansas City
McVay, James R., Jr., Kansas City
Maas, Hermann, St. Louis
Mabrey, John P., Plattsburg
Macauley, Bernard J., Poplar Bluff
MacBryde, Cyril M., Kirkwood
Macdonald, William C., St. Louis
Macdonnell, Carey R., Marshfield
Macdonnell, Thomas M., Marshfield
Machek, Otakar, St. Louis
MacInnis, Florence E., Kansas City
Mack, Mary L., Address unknown (Member Jasper County Medical Society)
Mack, Robert E., St. Louis
Macko, Joseph R., St. Louis
Maclean, John A., Los Angeles, Calif. (Member Jackson County Medical Society)
MacNaughton, Ralph E., Kansas City
MacNaughton, Robert A., Kansas City
Macnish, James M., St. Louis
Macon, William L., Jr., St. Louis
Maddox, Albert R., Sedalia
Maddox, John D., Joplin
Maddux, William P. Springfield
Madison, Waite H., Marshall
Magaletta, George E., St. Louis
Magee, Charles D., St. Louis
Magee, Robert L., El Dorado Springs
Magee, William E., St. Louis
Magidson, Joseph, Clayton
Magill, Joseph S., Milan
Maginn, Richard L., St. Joseph
Magness, Guy N., University City
Magness, William C., Branson
Mahe, George A., St. Louis
Maher, Robert W., Springfield
Maher, Thomas F., St. Louis
Mairs, Edgar J., Trenton
Maizus, Saul H., St. Louis
Major, Hermon S., Kansas City
Malinoski, Mitchell V., Poplar Bluff
Malles, A. Conrad, St. Louis
Mandler, George, Chillicothe
Manganaro, Frank J., St. Louis
Mangels, Kenneth A., Independence
Manion, Peter J., St. Louis
Mannis, Ben G., St. Louis
Mansur, Edward E., Miami, Fla. (Member Cole County Medical Society)
Manting, George, St. Louis
Maple, Francis M., Springfield
Maples, Floyd H., Mount Vernon
Marcus, Morris D., St. Louis
Margolis, Richard M., Florissant
Margulis, Alexander R., St. Louis
Markel, Arthur D., Poplar Bluff
Marks, Mark M., Kansas City
Marmor, William A., St. Louis
Mars, Hartley F., Forsyth
Marsh, Alice, Pleasant Hill
Marshall, Alfred H., Charleston
Marshall, Cameron F., Kansas City
Marshall, Wilbur J., Springfield
Marston, Warren G., St. Louis
Martin, Andrew D., Sikeston
Martin, Forrest L., Nevada
Martin, Frederick W., Jr., St. Louis
Martin, John N., St. Joseph
Martin, Maynard W., Houston, Tex. (Member St. Louis Medical Society)
Martin, Raymond T., St. Louis
Martin, Wilfred E., Odessa
Martin, W. Joe, Louisiana
Martt, Jack M., Columbia
Martz, John C., Webster Groves
Masor, Nathan A., Butler
Massie, Edward, St. Louis
Masters, William H., St. Louis
Mastin, E. Vernon, St. Louis
Masucci, Joseph M., Kansas City
Mathewson, Hugh S., Kansas City
Matteson, Frank B., Grant City
Matthews, John G., St. Louis
Matthews, John I., Jefferson City
Mattis, Robert D., Clayton
Maughs, Sydney B., St. Louis
Max, Paul F., St. Louis
Maxey, Hugh W., Jefferson City
Maxson, T. Reed, Warrensburg
Maxwell, Richard W., St. Louis
May, Albert L., Jr., Poplar Bluff
May, Benjamin F., St. Louis
May, James W., Kansas City
Mayer, John H., Jr., Kansas City
Mayer, Robert A., St. Louis
Mayfield, James L., Crystal City
Mays, Frank G., Washington
Maze, Lawrence E., St. Louis
Mead, Samuel T., Slater
Meador, James R., Clayton
Meagher, Arthur J., St. Louis
Meares, Cecil H., Jr., Joplin
Medler, Francis J., St. Louis
Meger, Robert F., St. Louis
Mehan, Donald J., St. Louis
Mehan, George T., St. Louis
Meier, Francis X., Jefferson City
Meinberg, William H., St. Louis
Meiners, Theodore M., Webster Groves
Meinershagen, C. W., Jefferson City
Meisenbach, A. Edward, St. Louis
Melgaard, S. Ross, Kansas City
Melick, William F., St. Louis
Meluney, Solomon E., St. Joseph
Mendelsohn, Robert S., St. Louis
Mendelson, David F., St. Louis
Mendonsa, Elsa L., University City
Mendonsa, Lawrence E., St. Louis
Menne, Marvin G., Ironton
Merenda, Sam J., St. Louis
Meriwether, Don R., Mission, Kan. (Member Jackson County Medical Society)
Merklin, Anton L., St. Louis
Merrims, Theodore, University City
Merritt, Burch A., St. Louis
Merryman, Charles H., Senath
Merz, Jean J., St. Louis
Mestres, Hugh M., St. Louis
Metz, Charles O., St. Louis
Meyer, Claude B., Nixa
Meyer, Curtis A., St. Louis
Meyer, Herman M., St. Louis
Meyer, James E., Ballwin
Meyer, Oscar D., St. Louis
Meyer, Paul W., Kansas City
Meyerhardt, Milton H., St. Louis
Meyers, Harold L., Kansas City
Meyers, John B., St. Louis
Meyers, Montague M., St. Louis
Mezera, Raymond A., University City
Michael, Kenneth D., St. Louis
Michael, Vernon E., St. Louis
Michaelis, Charles E., Fredericktown
Michaelree, John F., Maplewood
Middleman, Isadore C., St. Louis
Middleton, John W., Louisiana
Mier, Thomas M., St. Louis
Milano, Angelo, St. Louis
Milder, Benjamin, St. Louis
Miles, George O., Kansas City
Miles, Paul W., St. Louis
Miller, Charles, Jr., Kirkwood
Miller, Charles W., St. Louis
Miller, Clinton L., Lee's Summit
Miller, Clyde S., Waynesville
Miller, D. Herbert, Montgomery, Ala. (Member Chariton-Macon-Monroe-Randolph County Medical Society)
Miller, David V., Poplar Bluff
Miller, Gerald L., Kansas City
Miller, Harold W., Willow Springs
Miller, Howard S., Macon
Miller, James E., St. Louis
Miller, Leroy J., Columbia
Miller, Max I., Kansas City
Miller, Norman C., St. Louis
Miller, Oliver J., Cape Girardeau
Miller, Walter P., Kansas City
Miller, Wilson H., Kansas City
Millikin, Lester A., St. Louis
Mills, Warren B., St. Louis
Milster, Clyde R., St. Louis
Miltenberger, Paul C., Kennett
Minnihan, Robert W., Affton
Minton, Robert S., St. Joseph
Missey, Wilburn C., Jr., St. Louis
Mitchell, Andrew D., Kansas City
Mitchell, Robert H., Kansas City
Mitchell, Roy E., Salem
Mixson, William C., Kansas City
Modlin, John J., Columbia
Moen, Berwyn H., St. Joseph
Molden, Charles A., St. Louis
Molholm, Hans B., Little Rock, Ark (Member St. Louis Medical Society)
Monahan, Elmer P., Lenexa, Kan. (Member Jackson County Medical Society)
Monat, Seymour, St. Louis
Montani, Charles, St. Louis
Montello, Samuel A., Kansas City
Montgomery, Austin F., St. Louis
Montgomery, James G., Kansas City
Moody, Jackson C., Harrisonville
Mooney, Justin L., Kansas City
Mooney, Marcel L., Kansas City
Moore, Carl V., St. Louis
Moore, Harry G., St. Louis
Moore, Robert A., Kansas City
Moore, Sherwood, Steelville
Moore, Walter L., Clayton
Moore, William E., Normandy
Moranville, Benedict A., Columbia
Morehead, William E., Kennett
Morest, F. Stanley, Kansas City
Morfit, John C., St. Louis
Morgan, David B., Kansas City
Morgan, Harry C., St. Louis
Moriarty, Lauren R., Kansas City
Morrin, Kevin C., St. Louis
Morris, Clyde L., Caruthersville
Morris, Harvey E., St. Louis
Morris, Mary E., St. Louis
Morris, William R., Raytown
Morrison, George B., Nevada
Morrison, T. A., Aurora
Morse, Marvin, St. Joseph
Mortensen, Frede, St. Louis
Morton, Paul C., Springfield
Moseley, F. Thomas, Springfield
Moses, Robert A., St. Louis
Moss, Paul, Kansas City
Mosser, Robert S., Independence
Mothershead, John L., St. Joseph
Motzel, Albert J., St. Louis
Mountjoy, Grace S., St. Louis
Mowrey, William O., Jennings
Moyer, Carl A., St. Louis
Muckerman, Richard I. C., St. Louis
Mudd, James L., St. Louis
Mueller, Clarence E., St. Louis
Mueller, Joseph A., St. Louis
Mueller, Martin J., Kansas City
Mueller, Morris A., Clayton
Mueller, Robert, St. Louis
Mueller, Robert J., St. Louis
Mueller, Wilbur K., St. Louis
Muench, Albert H., St. Joseph
Muench, Ludwig O., Washington
Muenster, Vincent P., St. Charles
Muether, Raymond O., St. Louis
Mullarky, Wilbur A., St. Louis
Mullen, Jack, Bonne Terre
Mullen, Leo M., Kansas City
Mulligan, Leo V., St. Louis
Mullinax, Orr, Marshall
Mullins, Bernard L., North Kansas City
Multhauf, Cyril J., Mission, Kans. (Member Jackson County Medical Society)
Mundy, Homer F., St. Joseph
Mundy, William L., Kansas City
Munsch, Augustin P., St. Louis
Munsch, Girard A., Clayton
Murphy, Bernard L., Hannibal
Murphy, George E., St. Louis
Murphy, James P., St. Louis
Murphy, John C., St. Louis
Murphy, Paul, St. Louis
Murphy, Robert J., Kansas City
Muschany, Norman K., St. Louis
Musgrave, David E., Excelsior Springs
Musick, James D., Springfield
Musson, E. K., Clovis, N. M. (Member Chariton-Macon-Monroe-Randolph County Medical Society)
Mutshnick, Clara P., St. Louis
Myers, James M., Rolla
Myers, John Simeon, Kansas City
Myers, Robert M., Kansas City
Myers, Wilson A., Kansas City

N

Nakada, James R., St. Louis
Napper, Marvin L., Springfield
Narahara, Hiromichi T., St. Louis
Naryka, Joseph J., St. Louis
Nash, Francis P., St. Louis
Nash, Helen E., St. Louis
Nash, Homer E., Jr., St. Louis
Nash, W. Hampton, St. Louis
Nathan, Lester J., St. Louis
Natoli, Cornelius A., St. Louis
Neal, M. Pinson, Columbia
Needels, Orval T., Kansas City
Neilson, Arthur W., St. Louis
Neilson, Arthur W., Jr., Victorville, Calif. (Member St. Louis Medical Society)
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Nelson, Fred L., St. Joseph

Nelson, J. Roger, St. Louis
Nemec, Stanley S., St. Louis
Ness, Carl K., St. Joseph
Nesselrode, John H., Independence
Nester, Charles A., St. Louis
Netherton, George F., Cameron
Neu, Leo T., Jr., Springfield
Neubeiser, Ben L., St. Charles
Neun, William F., St. Louis
Neville, Edwin C., St. Louis
Newman, Mary Jane, Cassville
Newman, Percy, St. Louis
Newport, Gerald, Creve Coeur
Newton, William T., St. Louis
Nibbe, Albert F., Bethany
Nichols, Frank J., Fulton
Nicholson, Ralph L., Excelsior Springs
Nickel, James F., St. Louis
Nickson, Charles E., Jr., Independence
Nicolai, Charles H., St. Louis
Nicolay, Kenneth S., Kansas City
Niedermeyer, Edward L., Tarkio
Niedermeyer, George J., St. Louis
Niesen, Frank J., St. Louis
Nigh, Charles A., Hannibal
Nigro, Dominic M., Kansas City
Nigro, E. Robert, Kansas City
Nigro, Joseph A., Kansas City
Nishi, James A., St. Louis
Nista, Joseph A., Camp Lejeune, N. C. (Member St. Louis Medical Society)
Nix, Winston K., Marshall
Nixon, Edward E., Gallatin
Noah, Joseph W., St. Louis
Nofles, James W., St. Louis
Nolan, Charles J., St. Louis
Noller, Henry W., St. Louis
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Northrup, Glenn R., St. Louis
Norton, William H., St. Louis
Nuetzel, John A., Clayton
Nunn, Pat M., Kansas City
Nunnelly, Gordon M., Cape Girardeau
Nussbaum, Paul B., Cape Girardeau
Nussbaum, Robert A., St. Louis
Nye, Robert S., St. Louis

O

Oakley, John E., Clayton
O'Bannon, L. W., Jr., Florissant
Obermeyer, Charles G., St. Louis
O'Brien, Edward C., St. Louis
O'Brien, Harry F., Mexico
O'Brien, James A., Muskogee, Okla. (Member Jasper County Medical Society)
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O'Brien, Robert M., St. Louis
O'Connell, Frank A., Kansas City
O'Connell, Gerald L., Grandview
O'Connor, Robert J., Florissant
O'Connor, William B., St. Joseph
O'Dell, Timothy T., Oran
O'Donnell, Joseph V., St. Louis
O'Dowd, James A., St. Louis
Oehler, William F., Cape Girardeau
Oetter, Donald L., St. Louis
Ogilvie, John H., Gravois Mills
Ogura, Joseph H., Ladue
O'Hearne, John J., Kansas City
Ohmoto, Masao, St. Louis
O'Keefe, Joseph D., St. Louis
O'Leary, James L., St. Louis
Olive, George C., Neosho
Oliver, George A., Farmington
Olmsted, William H., St. Louis
O'Malley, Eugene J., St. Louis
O'Malley, James F., Kansas City
O'Neal, Lawrence W., St. Louis
O'Neal, Patricia, St. Louis
O'Neil, James H., Kansas City
O'Neill, John B., St. Louis
Ongjoco, Melchor I., St. Louis
Oppenheimer, Henry E., Clayton
O'Reilley, D. Elliott, Clayton
Orenstein, Joseph M., St. Louis
Orgel, M. Norman, St. Louis
Osborne, Charles D., Sedalia
Osgood, George M., Prairie Village, Kan. (Member Jackson County Medical Society)
Ossman, Julian A., Jefferson City
Ost, Mark D., Kansas City
O'Sullivan, George A., St. Louis
Ott, Harold J., Maplewood
Ottensmeyer, Charles D., Overland
Otto, Thomas G., Cape Girardeau
Overesch, Harry B., Kansas City
Overholser, Milton D., Columbia
Owen, James W., Jr., St. Louis
Owen, Robert F., St. Louis
Owens, Graham J., Kansas City
Owens, Hugh H., Kansas City
Owens, Michael J., Kansas City
Owens, Richard L., Kansas City
Owens, Robert H., Kansas City
Ozar, Milton B., Kansas City

P

Paddock, Charles S., Joplin
Paddock, Richard, St. Louis
Padfield, Earl G., Jr., Kansas City
Paine, Robert, St. Louis
Painter, Andrew E., Portageville
Painter, Lattie B., Jr., Portageville
Pakula, Sidney, Kansas City
Palazzo, Frank A., St. Louis
Palcheff, Chris L., Springfield
Palenske, Robert L., Hornersville
Paletta, Francis X., St. Louis
Pallett, Harold A., Kansas City
Papp, Sandor D., Joplin
Parashak, Paul M., St. Louis
Parato, John M., St. Louis
Pareira, Morton D., Clayton
Paris, William H., St. Louis
Park, George M., Eureka
Park, Wm. I., Jr., Springfield
Parker, Arthur C., Jr., Poplar Bluff
Parker, Brent M., St. Louis
Parker, Elmer L., Kansas City
Parker, H. Graham, Platte City
Parker, Hubert M., Kansas City
Parker, Robert H., North Kansas City
Parker, Thomas W., University City
Parker, William, St. Louis
Parkhurst, Charles L., Houstonia
Parks, Stephen, Bloomfield
Parsons, Ernest H., St. Louis
Parsons, Eugene O., Kansas City
Parsons, Richard P., St. Louis
Pascoe, James J., Nevada
Passanante, Bartholomew M., St. Louis
Passman, Harold, Kansas City
Pate, Otho S., North Kansas City
Patterson, Donald R., Joplin
Patterson, Grover S., Carthage
Pawol, S. E., St. Louis
Payne, Bryan T., Lexington
Payne, John W., Columbia
Payne, Meredith J., St. Louis
Pearl, John F., St. Clair
Pearse, Roy W., Jr., Nevada
Pearson, Paul E., Kansas City
Peck, Chester R., Jr., Kennett
Peckham, John W., St. Louis
Peden, Burnet W., Clayton
Peden, Joseph C., St. Louis
Peden, Joseph C., Jr., St. Louis
Peeler, James O., St. Louis
Peete, Don C., Kansas City
Pelz, Mort D., St. Louis
Pemberton, Charles W., Mendon
Penn, Robert M., Silex
Penner, Stanley, Kansas City
Penney, David L., St. Louis
Penninger, William H., Springfield
Pennington, Francis E., St. Louis
Pennoyer, James, Webster Groves
Perll, Maurice F., Kansas City
Perll, Rita D., Kansas City
Perna, Vincent P., Columbia
Pernoud, Flavius G., Jr., St. Louis
Pernoud, Michael F., St. Louis
Perry, David C., Mound City
Perry, H. Mitchell, Kirkwood
Perry, John M., Princeton
Perry, Lawrence L., Jr., North Kansas City
Perry, Ralph, Kansas City
Perry, William D., St. Louis
Peters, Evelyn L., Kansas City
Petersen, Arthur G., Prairie Village, Kan. (Member Jackson County Medical Society)
Petersen, Eugene G., Kansas City
Petersen, Harold E., St. Joseph
Peterson, Carl M., Kansas City
Peterson, Frederick D., St. Louis
Peterson, George L., Kansas City
Peterson, Milton C., Kansas City
Peterson, Stanley S., Springfield
Peterson, Walter R., Kansas City
Petry, Ezra L., Kansas City
Pettit, Manson B., St. Joseph
Peugnet, Hubert B., St. Louis
Pfeffer, Robert I., St. Joseph
Pfeifer, Oliver C., St. Louis
Pfuetze, Edwin L., Kansas City
Phillips, Hanford, St. Louis
Piccione, Leonard M., St. Louis
Pickard, Clarence M., Columbia
Pickard, Nicholas S., Kansas City
Pickens, E. Allen, Nevada
Pickens, Edgar E., Kansas City
Pickrell, Claude D., Clayton
Pierron, John B., Kansas City
Pifer, Lawrence H., St. Joseph
Pileggi, Felix A., North Kansas City
Pilla, Lawrence A., St. Louis
Pingelton, William B., Columbia
Pinsker, Oscar T., Kansas City
Piper, August T., St. Louis
Piper, Donald K., Kansas City
Pipes, Keith E., Brentwood
Pipkin, Garrett, Kansas City
Pittam, Radford F., Hutchinson, Kan. (Member Jackson County Medical Society)
Plag, Albert F., St. Louis
Platt, William R., Clayton
Platz, John H., Carrollton
Plesons, John D., St. Louis
Plowman, Edward M., Hannibal
Plumlee, John E., Columbia
Plumlee, William C., Springfield
Plumpe, W. Tupper, St. Louis
Poggemeier, William H., Jr., St. Charles
Polk, George M., Lee's Summit
Polk, John W. Springfield
Pollack, Maxwell A., St. Louis
Pollock, Leo H., Kansas City
Poor, Carl W., Neosho
Popp, Carl G., Sikeston
Porporis, Arthur A., St. Louis
Porter, Louis, Kansas City
Porter, Russell, Tucson, Ariz. (Member Clay County Medical Society)
Porterfield, John F., Silver Spring, Md. (Member Boone County Medical Society)
Portuondo, Bonaventura C., St. Louis
Post, Cyril A., Poplar Bluff
Post, John P., Washington
Post, M. Hayward, St. Louis
Post, Winfred L., Joplin
Potashnick, Robert, St. Louis
Potter, Allen B., Bowling Green
Potter, Caryl A., Jr., St. Joseph
Potter, Lee G., Kansas City
Potter, Reese H., St. Louis
Potter, Thompson E., St. Joseph
Powell, Carl A., St. Louis
Powell, Earl A., St. Louis
Powell, Edwin M., Springfield
Powell, Nelson E., Kansas City
Powers, John M., Kansas City
Powers, Pierce W., St. Louis
Pranger, Sylvester H., St. Louis
Prater, Bill G., Springfield
Prentiss, Harry S., Kansas City
Presnell, Cleitus A., St. Louis
Press, Maurice J., St. Louis
Preston, Albert, Jr., Kansas City
Price, Charles H., Cassville
Price, Kenneth C., St. Louis
Price, Robert P., St. Joseph
Printz, Joseph H., Kansas City
Printz, Otto J., Kansas City
Probstein, Jacob G., St. Louis
Proctor, Donald C., Sedalia
Proetz, Arthur W., St. Louis
Pruett, Burchard S., St. Louis
Pruett, Hubert S., St. Louis
Pruett, Paul L., Springfield
Pucci, Gregory L., Kansas City
Puckett, Cordelia, St. Louis
Pugh, Richard G., Independence
Purcell, Elmer M., Springfield
Purcell, Harry K., New Delhi, India (Member St. Louis Medical Society)
Pyne, Herbert S., St. Louis

Q

Quer, Erich A., Kansas City
Quistgard, Paul C., Kansas City

R

Rachlin, Maxwell, Brentwood
Rader, Ada B., Martin City
Rader, George B., St. Louis
Raemdonck, Alphonse J., St. Louis
Ragland, John E., Ballwin
Ragsdale, George M., Paris
Rainey, Robert, St. Louis

Rainwater, Elmer H., Springfield
Ramey, Ehret O., Kansas City
Ramos, John F. Jr., Kansas City
Ramos, Raoul L., St. Louis
Ramsey, Robert H., Ferguson
Randall, Don Q., St. Charles
Randall, Leslie, Licking
Randolph, Andrew J., Kansas City
Rannie, Paul R. Independence
Ransdell, James F., Hayward, Calif.
(Member Boone County Medical Society)
Rapp, Earl L., Hannibal
Rapp, Harold B., Cape Girardeau
Rawlins, Fred E., Cape Girardeau
Rawlins, Kelly, Holden
Ray, C. Thorpe, Columbia
Ready, James H., Florissant
Reas, Herman W., St. Louis
Rector, Joe L., Jr., Kansas City
Redington, James C., Jr., Clayton
Redmond, William, St. Joseph
Reeder, Charles C., New Madrid
Reese, A. Victor, Webster Groves
Reh, Edward P., St. Louis
Reich, Harry A., St. Louis
Reich, Oliver F., Kimmswick
Reichert, M. Cecelia, St. Louis
Reiches, Aaron J., St. Louis
Reichlin, Seymour, St. Louis
Reid, James A., Marshall
Reid, William F., Richmond, Va.
(Member St. Louis Medical Society)
Reider, Richard A., St. Louis
Reilly, Leo J., St. Louis
Reilly, Pierce J., St. Louis
Reineck, John A., St. Louis
Reinhard, Edward H., St. Louis
Reinhardt, George R., Kansas City
Reis, Carl J., St. Louis
Reiss, Eric, University City
Reister, Dorothy D., Kansas City
(Member St. Louis County Medical Society)
Reister, Philip D., Kansas City
Reitman, Stanley, St. Louis
Reitz, Carl H., Kansas City
Remley, George C., Kansas City
Rendleman, George F., St. Louis
Rennard, Marvin, St. Louis
Repetto, Albert M., St. Louis
Repp, Theodore J., St. Louis
Reuter, Louis A., St. Louis
Revare, Paul, North Kansas City
Reynolds, Clarence C., Kansas City
Reynolds, Fred, St. Louis
Reynolds, Garland A., Cape Girardeau
Reynolds, James R., Neosho
Rhoades, Arthur B., Kansas City
Rhodes, Euhlan L., Warsaw
(Member Pettis County Medical Society)
Rice, Carl E., Hillsboro
Rice, Earl R., Ft. Lauderdale, Fla.
(Member St. Louis Medical Society)
Rice, Grover C., Brunswick
Richards, Frank O., St. Louis
Richardson, George A., Union
Richardson, Marion W., Kansas City
Richardson, Reginald G., Jefferson City
Richardson, William R., Union
Richert, Robert C., Kansas City
Richman, Elmer, St. Louis
Richter, William B., Stockton
Riddell, Richard V., St. Joseph
Ridings, Harold D., Cape Girardeau
Ries, Douglas A., Richmond Heights
Riffel, Gordon W., Bourbon
Rifkin, Shale M., St. Louis
Riggio, Salvatore N., St. Louis
Riggs, Orval E., Poplar Bluff
Rigney, Levi M., Springfield
Riley, Charles T., Richmond
Riley, John J., St. Louis
Riley, Ralph D., St. Louis
Riley, Ralph W., Lexington
Riley, William H., St. Louis
Riller, Lowell E., Kansas City
Ringo, Henry J., St. Louis
Rinkel, Herbert J., Kansas City
Rinker, Carl T., Jr., Macon
Riordan, Lawrence M., St. Louis
Ritchie, Frances R., St. Louis
Ritter, Hubert A., St. Louis
Ritter, Paul J., St. Louis
Ritter, Raymond A., Cape Girardeau
Ritterbusch, James K., Fulton
Roark, Glenn E., Columbia
Roberson, John H., Lilbourn
Roberts, Grosvenor G., Kansas City
Roberts, Harold K., Clayton
Roberts, Harold M., Kansas City
Roberts, John P., Kirkwood
Roberts, John R., St. Louis
Roberts, L. Marvin, North Kansas City
Roberts, Paul A., Sweet Springs
Roberts, Sam E., Kansas City
Robertson, Frank G., St. Louis
Robertson, LeRoy L., St. Louis
Robertson, Robert C., Fulton
Robertson, William D., Poplar Bluff
Robichaux, Eugene B., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Robins, Eli, St. Louis
Robinson, Arthur W., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Robinson, Edith C., St. Louis
Robinson, Edward E., Adrian
Robinson, Ernest K., Kansas City
Robinson, George G., Humansville
Robinson, G. Wilse, Jr., Kansas City
Robinson, John A., Edgerton
Robinson, William J., Kansas City
Robison, James T., Jr., Kansas City
Roblee, Melvin A., St. Louis
Roche, Maurice B., St. Louis
Rodeman, John M., Sedalia
Rodes, Ned D., Mexico
Rodgers, Elrie P., Columbia
Rodgers, Samuel U., Kansas City
Roe, Allen N., Berger
(Member St. Louis Medical Society)
Roebber, Harry M., Bonne Terre
Roehrs, Marvin E., Marshall
Rogers, Cyril H., St. Louis
Rogers, Donald B., Nixa
Rogers, John A., University City
Rogers, John T., St. Joseph
Rohlfing, Edwin H., St. Louis
Rohlfing, Walter H., St. Louis
Roller, Merrill J., Hannibal
Rollins, Harry D., Winona
Rolufs, Lloyd S., Kirkwood
Rolwing, E. Charles, Charleston
Ronald, Douglas C., Butler
Roodman, Herman J., Clayton
Roper, Stanley D., Ozark
Rose, Charles W., Kansas City
Rose, Dalton K., Clayton
Rose, Frank H., Albany
Rosecan, Marvin, St. Louis
Rosen, Charles S., St. Louis
Rosen, Max, Springfield
Rosenbaum, Harry D., St. Louis
Rosenbaum, Herbert E., St. Louis
Rosenberg, Henry E., St. Louis
Rosenfeld, Henry, St. Louis
Rosenthal, Irwin I., St. Joseph
Ross, Herman C., Brentwood
Rost, William B., St. Joseph
Roter, Alexander M., St. Charles
Roth, Daniel, St. Louis
Roth, John J., St. Louis
Rother, Paul H., St. Charles
Rothman, David, St. Louis
Rothweiler, Robert J., St. Louis
Rotter, Julius C., St. Louis
Roufa, Joseph F., St. Louis
Roulhac, George E., St. Louis
Roundy, Collis I., St. Joseph
Rouse, David M., Mexico
Rouse, Ernest T., St. Louis
Rowlette, Avery P., Moberly
Roy, Joseph A., Jennings
Royce, James J., Noel
Royce, Robert K., St. Louis
Royse, Roy P., Sullivan
Royston, Grandison D., Hope, Ark.
(Member St. Louis Medical Society)
Rubenstein, Melvin, St. Louis
Rubin, Robert, St. Louis
Rubin, Sidney, Kansas City
Rubnitz, Leon H., Kansas City
Ruddell, George W., St. Louis
Rudi, Herbert J., St. Louis
Rufe, John R., Kansas City
Ruff, T. Eugene, Poplar Bluff
Ruhling, Rudy, St. Louis
Rusk, Earl M., New Bloomfield
Russell, Barbara E., Rolla
Russell, Earl D., Springfield
Russell, James L., Kansas City
Russell, Richard L., Kansas City
Russell, Robert K., Raytown
Rutledge, John F., Festus
Rutledge, Paul E., Kirkwood
Rutledge, William J., Campbell
Ryan, John B., Washington
Ryan, John H., St. Joseph
Ryan, John J., Clayton
Ryan, Robert E., St. Louis

S

Sachar, Leo A., St. Louis
Saferstein, A. Lester, Kansas City
St. John, Thomas C., St. Louis
Sala, Jose M., Columbia
Saladino, Anthony, Kansas City
Sale, Llewellyn, St. Louis
Sale, Llewellyn, Jr., St. Louis
Salisbury, William J., St. Louis
Saltzstein, Sidney, St. Louis
Sammons, Harry C., St. Louis
Sample, George A., Chaffee
Samuelson, Edward A., Kansas City
Sanders, George E., Excelsior Springs
Sanders, Harmon U., Jr., Independence
Sanders, Robert D., St. Louis
Sanders, Theodore E., St. Louis
Sanders, William F., Kansas City
Sandy, Charles, Prairie Village, Kan.
(Member Cooper County Medical Society)
Sante, Leroy R., St. Louis
Santiago, Miguel, St. Louis
Santoro, Carlos G., Kansas City
Saper, Philip, Lee's Summit
Sargent, Alden P., Sikeston
Sargent, John P., Sikeston
Sarno, Samuel M., Morehouse
Sato, George, St. Louis
Satterfield, Val B., Chesterfield
Sauer, Gordon C., Kansas City
Sauer, W. Nicholas, St. Louis
Saunders, Everett L., Independence
Sausville, Albert J., St. Louis
Sawyer, Floyd E., North Kansas City
Sawyer, James, St. Louis
Scanlon, Robert C., Springfield
Scarpellino, Louis, Kansas City
Schaan, Robert C., St. Louis
Schaefer, George J., St. Louis
Schaerer, Jacques P., St. Louis
Schaerrer, Hans, Kansas City
Schaerrer, William C., Kansas City
Schaper, Ernest H., St. Louis
Schattyn, Martyn, St. Louis
Schechter, Samuel E., Clayton
Scheele, Paul M., Brentwood
Scheer, George E., St. Louis
Scheff, Harold, St. Louis
Scherman, Victor E., St. Louis
Schertz, Truman B., North Kansas City
Scheuber, Charles, Columbia
Schewe, A. Craig, St. Louis
Schewe, Elmer J., Jr., Columbia
Schierman, William D., University City
Schiffmacher, Jack E., Kansas City
Schillie, Gene A., Kansas City
Schlansky, Seymour M., St. Louis
Schlenker, Lawrence, St. Louis
Schluer, Elmer P., St. Louis
Schlueter, Newell W., St. Louis
Schmidt, Charles A., Gerald
Schmidt, Edwin H., St. Louis
Schmidt, Edmund M., St. Louis
Schmidt, Herbert H., Washington
Schmiemeier, Herman A., St. Louis
Schmiemeier, Roy H., St. Louis
Schmitz, Edgar F., St. Louis
Schneider, Sam, St. Louis
Schneider, Vincent A., St. Charles
Schnoebelen, Paul C., St. Louis
Schoeberl, Cletus B., Joplin
Schopp, Alvin C., St. Louis
Schorer, Edwin H., Kansas City
Schottman, Gerhard W., Jr., Kansas City
Schrepel, Herbert O., St. Louis
Schroeder, Henry A., St. Louis
Schulte, Gregory A., Joplin
Schultz, Loraine E., Columbia
Schultz, Samuel, St. Louis
Schuman, Stanley H., Ann Arbor, Mich.
(Member St. Louis County Medical Society)
Schutz, Carl B., Kansas City
Schutz, Richard B., Kansas City
Schwartz, Eugene J., Springfield
Schwartz, Frederick O., St. Louis
Schwartz, Henry G., St. Louis
Schwartz, Melvin M., St. Louis
Schwartzman, Bernard, St. Louis
Schwarz, Ralph C., Oak Harbor, Wash.
(Member St. Louis Medical Society)
Schweiss, John F., St. Louis
Schweitzer, Fred C., Jr., Springfield
Sciortino, Gaspare, St. Louis
Sciortino, John S., St. Louis
Scopelite, Joseph A., St. Louis

Scorse, Sidney W., Joplin
Scott, Clive D., Louisiana
Scott, Elijah A., St. James
Scott, Elwin P., St. Louis
Scott, Wendell G., St. Louis
Seabaugh, D. Rusby, Cape Girardeau
Seabaugh, Dayton I. L., Jackson
Seabaugh, Loy R., Cape Girardeau
Seabaugh, Oda L., Cape Girardeau
Seabaugh, Ottis D., Webster Groves
Seabaugh, William O. L., Cape Girardeau
Seabold, John A., University City
Seddon, John W., St. Louis
See, William B., Columbia
Seeley, James B., Blue Springs
Seeley, James J., St. Louis
Seely, Clark W., Kansas City
Seib, George A., St. Louis
Seidel, Donald R., St. Louis
Senn, Emmett J., Herculaneum
Senne, Herbert C., St. Joseph
Sennott, John S., Jefferson City
Senor, Samuel E., St. Joseph
Senturia, Ben H., St. Louis
Senturia, Hyman R., St. Louis
Serkes, Kenneth D., St. Louis
Sertl, John D., St. Louis
Sevin, Omar R., Rockhall, Md.
  (Member St. Louis Medical Society)
Sewell, Minor F., Kansas City
Sewell, Walter S., Springfield
Sewing, Arthur H., St. Louis
Sexauer, Arthur E., Ste. Genevieve
Sexton, Daniel L., St. Louis
Sexton, Elmer E., St. Louis
Shackelford, Horace H., St. Louis
Shahan, Philip T., St. Louis
Shanahan, Mary P., Monroe City
Shaner, John F., St. Louis
Shapiro, Lazare M., Kansas City
Shapleigh, John B., St. Louis
Sharp, Austin R., St. Louis
Shatz, Burton A., St. Louis
Shaw, Carvel T., Hermann
Shaw, Gordon, Mexico
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette
Shea, James G., Gerald
Sheahon, John A., Kansas City
Schecter, Nathan, Kansas City
Sheets, John S., St. Louis
Sheets, Martin E., St. Louis
Shelden, Russell D., Kansas City
Sheldon, John, Kansas City
Shelton, Edward O., Eldon
Shen, Jerome T. Y., St. Louis
Shepherd, Charles T., St. Louis
Sheppard, Lee C., Jr., San Diego, Calif.
  (Member Boone County Medical Society)
Sherard, Julius C., St. Louis
Sheridan, Edmund R., St. Louis
Sherman, Alfred I., St. Louis
Sherry, Sol, St. Louis
Sherwin, Charles S., St. Louis
Shevlin, Charles F., St. Joseph
Shieber, William, St. Louis
Shifrin, Alexander, Kansas City
Shinkawa, Shigeo, St. Charles
Shireman, Kenneth L., Kansas City
Shires, Edward B., Kansas City
Shirey, Arnold G., Hayti
Shobe, Frank O., St. Louis
Shockley, Clarence J., Kansas City
Shofstall, Charles K., Kansas City
Shoss, Milton, Cape Girardeau
Shrader, E. Lee, St. Louis
Shreffler, Algie R., Tavernier, Fla.
  (Member St. Louis Medical Society)
Shrout, Cecil B., Bunceton
Shuey, Herbert H., Kansas City
Shull, George D., Jefferson City
Shuman, Joseph S., St. Louis
Shumate, L. St. Clair, Reeds Spring
Shutt, Cleveland H., St. Louis
Shyken, Herman, St. Louis
Shypper, Moses J., Kansas City
Siceluff, Joseph G., Springfield
Siegel, Carl D., Sedalia
Siegel, Peter V., Smithton
Siemers, George E., St. Louis
Siesener, Herbert H., St. Louis
Sievers, Edward F., Miami Beach, Fla.
  (Member St. Louis Medical Society)
Sights, Warren P., Jr., Columbia
Signorelli, Andrew J., St. Louis
Silsby, Don H., Springfield
Silsby, Don J., Springfield
Silsby, Harry D., Springfield
Silverberg, Charles, St. Louis
Silvermintz, Saul D., Ladue
Simmons, Charles R., Windsor
Simms, Otho M., St. Charles
Simon, Bettie H., St. Louis
Simon, David L., St. Louis
Simon, Jerome I., St. Louis
Simon, Nathan M., St. Louis
Simon, Sanford, Kansas City
Simon, Selig, St. Louis
Simpson, Albert P., Springfield
Simpson, Eber, St. Louis
Simpson, Emerson L., Springfield
Simpson, Guy L., St. Louis
Simpson, Lloyd, Columbia
Simril, Wayne A., Clayton
Sinclair, Alexander B., Kansas City
Singleton, J. Milton, Kansas City
Sisk, James C., Clayton
Sisson, Richard G., St. Louis
Skeffington, Mary Jane, St. Louis
Skilling, David M., Jr., St. Louis
Skillman, Robert K., Shawnee Mission, Kan.
  (Member Jackson County Medical Society)
Skinner, John O., Kansas City
Skinner, John S., St. Louis
Skinner, John T., Kansas City
Slaughter, Shelby C., Fredericktown
Slentz, Edwin L., Kansas City
Slentz, William A., Kansas City
Slickman, Robert A., Kansas City
Small, Walter L., Kansas City
Smart, Leon A., St. Louis
Smathers, John H., Florissant
Smiley, William, St. Louis
Smit, Herbert M., St. Louis
Smith, Arthur A., Florissant
Smith, Arthur B., Kansas City
Smith, Audra B., Sikeston
Smith, Benjamin F., Jr., Clayton
Smith, C. Souter, Springfield
Smith, Carl C., Moberly
Smith, Clifton, St. Joseph
Smith, Dale C., Kansas City
Smith, Frank J., St. Louis
Smith, Garland F., St. Louis
Smith, George E., Kirkwood
Smith, Grafton A., Columbia
Smith, Harvey S., Springfield
Smith, Herbert P., St. Louis
Smith, Hubert E., Kansas City
Smith, Hugh R., St. Louis
Smith, Ira T., Kansas City
Smith, J. Earl, St. Louis
Smith, James O., Clinton
Smith, Jason N., Jr., Columbia
Smith, Joe R., Columbia
Smith, John R., St. Louis
Smith, Kathleen, St. Louis
Smith, Louis J., New Madrid
Smith, Milton, St. Louis
Smith, O. D., Overland Park, Kan.
  (Member Jackson County Medical Society)
Smith, Robert M., St. Louis
Smith, Robert S., Portageville
Smith, Robert W., Marceline
Smith, Roland T., Joplin
Smith, Rollin H., West Plains
Smith, Sidney E., St. Louis
Smith, Ulysses S., Hannibal
Smith, William A., Somerton, Ariz.
  (Member St. Louis County Medical Society)
Smith, William J., Hannibal
Smith, William J., Windsor
Smith, William R., Carthage
Smolik, Edmund A., St. Louis
Smull, Ned W., Shawnee Mission, Kan.
  (Member Jackson County Medical Society)
Snead, William H., Jr., Springfield
Sneid, Philip, Kansas City
Snider, Samuel H., Kansas City
Snyder, Edward N., St. Louis
Sommer, Conrad S., St. Louis
Sommer, Ross B., St. Louis
Soule, Samuel D., St. Louis
Spafford, Allen L., Kansas City
Spalding, Wilber B., Plattsburg
Spears, Joe L., Cabool
Spelman, Archibald E., Smithville
Spence, Elbert L., Kennett
Speno, Angelo A., Rock Hill
Spinzig, Edgar W., Kirkwood
Spitz, Milton A., Milwaukee, Wis.
  (Member St. Louis County Medical Society)
Spitzer, Ernest, University City
Spoeneman, Marlin C., St. Louis
Spoenemann, Walter H., St. Louis
Sportsman, Weldon L., Kansas City
Spratt, John S. Jr., St. Louis
Sprehe, Daniel J., Warrensburg
Spurgeon, Milo J., Columbia
Spurny, Otto M., Kansas City
Stacey, Wallace R., Independence
Stacy, Winton T., St. Joseph
Staehle, Melvin E., St. Louis
Staggs, William A., Kansas City
Staley, Harry R., Kansas City
Stallard, Donald J., St. Joseph
Stamp, Warren C., St. Louis
Stanfield, Ned M., Jr., St. Louis
Stansbrough, Raymond A., St. Louis
Starke, Helen, Kansas City
  (Sister Paula Therese)
Starkloff, Gene B., St. Louis
Starkloff, Max, St. Louis
Statland, Harry, Kansas City
Statland, Morris, Kansas City
Staton, R. Hamilton, Carrollton
Stauffacher, C. Gordon, Sedalia
Stauffer, Harry B., Jefferson City
Stecker, George, St. Louis
Steele, Jack T., Ferguson
Steele, James C., Jr., Hannibal
Steffen, Lawrence F., Kansas City
Stegman, Elmer G., Raytown
Stein, Arthur H., Jr., St. Louis
Stein, Harry J., St. Louis
Stein, Joseph W., Kansas City
Stein, Leonard A., St. Louis
Steinbeck, Herbert D., Union
Steinbeck, Herbert F., St. Louis
Steinberg, Franz U., St. Louis
Steiner, Alexander J., St. Louis
Stelle, Charles W., Kansas City
Stelmach, Walter J., Kansas City
Stephan, August P., Jefferson City
Stephens, LeRoy J., St. Louis
Stephens, Louis F., St. Louis
Stephens, William A., St. Louis
Stephenson, Hugh E., Jr., Columbia
Stergen, Nick E., St. Louis
Sterkel, Richard L., St. Louis
Sterling, Charles E., St. Louis
Sterling, John A., Maplewood
Stevens, Robert W., St. Louis
Stevens, W. R., Kansas City
Stewart, Floyd, St. Louis
Stewart, Frances H., St. Louis
Stewart, John W., St. Louis
Stewart, Robert B., Springfield
Stewart, Robert H., Sedalia
Stewart, R. Wendell, Springfield
Stewart, William J., Columbia
Stickle, Arthur W., St. Louis
Stickler, Ralph O., Kirksville
Stindel, Charles E., Webster Groves
Stine, Dan G., Columbia
Stocking, Lyman C., Kirkwood
Stockton, Raymond W., Kansas City
Stockwell, A. Lloyd, Kansas City
Stokes, James M., St. Louis
Stokes, Julius B., Excelsior Springs
Stolar, Jacob, St. Louis
Stone, Charles A., St. Louis
Stoneman, William III, St. Louis
Stotts, Charles S., Prairie Village, Kan.
  (Member Jackson County Medical Society)
Stratemeier, Edward H., Kansas City
Strauchen, Gilbert W., Webster Groves
Strauss, Arthur E., St. Louis
Streetor, Roderick D., St. Louis
Strehlman, Benjamin G., Union
Stricker, Emil A., St. James
Stricker, Harold C., Jefferson City
Strittmatter, James C., Caruthersville
Strominger, Donald B., St. Louis
Strong, Richard M., Hannibal
Stryker, Garold V., St. Louis
Stryker, William I., St. Louis
Stuart, Byron M., Boonville
Stuart, Daniel D., Brunswick
Stude, William C., St. Louis
Stuebner, Roland W., St. Louis
Stutsman, Albert C., St. Louis
Sudholt, Alfred F., Jr., St. Louis
Sugarbaker, Everett D., Jefferson City
Suggett, Finis C., Columbia
Sullivan, B. Hazard, Miami
Sullivan, Clement J., St. Louis
Sullivan, James F., St. Louis
Sullivan, William J., Providence, R. I.
  (Member North Central Counties Medical Society)
Sultzman, Francis E., Hannibal
Summers, Caldwell B., Kansas City
Summers, Jacob H., Lebanon
Summers, John B., St. Louis

Summers, Joseph S., Jr., Jefferson City
Summers, Thomas F., St. Louis
Sunderman, Raymond C., St. Louis
Sundstrom, Frank D., Springfield
Sunshine, Herbert, St. Louis
Susman, Irvin C., St. Louis
Susman, Noah, Columbia
Sutherland, Gladys P., Bethany
Sutphin, John B., Ferguson
Sutter, Richard A., St. Louis
Swarm, Richard L., Bethesda, Md.
(Member St. Louis Medical Society)
Sweany, Henry C., Mount Vernon
Sweet, Herbert C., Webster Groves
Sweets, Henry H., Jr., Hannibal
Sweiger, James H., Maysville
Swekosky, Frank J., St. Louis
Swisher, Robert C., Kansas City
Switzer, Clyde, Merriam, Kan.
(Member Jackson County Medical Society)
Sydow, Henry A., Fulton
Szabados, Ernest D., Independence
Szymanski, Stanley R., Moberly

T

Tadlock, Baxter W., St. Joseph
Tahir, Mohammad, St. Joseph
Talbott, Hudson, Louisville, Ky.
(Member St. Louis Medical Society)
Tanaka, George M., St. Louis
Tanner, Robert H., Jefferson City
Tapper, Stephen M., St. Louis
Tarrasch, Ernest L., Springfield
Tarson, Solomon S., Kansas City
Tarver, Quinton, Kennett
Tarvydas, Francis, Edina
Tashma, Sigmund, St. Louis
Tasker, Charles B., Kansas City
Tate, Lloyd L., St. Louis
Taussig, Barrett L., St. Louis
Taylor, Elmer W., Lockwood
Taylor, Eugene D., St. Louis
Taylor, Eugene T., St. Louis
Taylor, Helen L., St. Louis
Taylor, J. E., Kansas City
Taylor, Leo T., Neosho
Taylor, Leon A., Jefferson City
Taylor, Van W., Bonne Terre
Taylor, William E., Springfield
Teall, Raymond E., Kansas City
Teare, Max E., Kansas City
Teiber, Frederick W., St. Louis
Tellez, Edward R., Fulton
Ternberg, Jessie L., St. Louis
Terrill, Robert S., Kansas City
Tess, Melvin J. H., St. Louis
Tesson, James A., Kansas City
Thale, Thomas, St. Louis
Theel, Otto W. Jr., Kansas City
Thiele, Belmont R., St. Louis
Thiele, George H., Shawnee Mission, Kan.
(Member Jackson County Medical Society)
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Thoma, George E. Jr., St. Louis
Thomas, Charles S., St. Louis
Thomas, Christopher Y., Kansas City
Thomas, Forrest, St. Joseph
Thomas, Horace E., Columbia
Thomasson, David D., Springfield
Thomasson, Mary W., University City
Thomasson, Robert E., St. Louis
Thompson, Charles L., Kansas City
Thompson, Emma A. B., Columbia
Thompson, F. Gregg, Jr., St. Joseph
Thompson, F. Gregg, III, St. Joseph
Thompson, Ian M., Columbia
Thompson, J. William, St. Louis
Thompson, Lawrence D., St. Louis
Thorn, Druery R., Kansas City
Threadgill, Jesse M., Forsyth
Throgmorton, Howard B., Sikeston
Thurber, Claude M., Windsor
Thurman, Hill C., Parkville
Thym, Henry P., St. Louis
Tibbs, William A., Jr., St. Louis
Tice, Wayne K., Independence
Tichenor, Robert W., Sappington
Tietjen, Frederick O., Jefferson City
Tiffany, D. E., Mountain View
Tillman, Walter W., Jr., Springfield
Timpton, Richard H., St. Louis
Tindall, Robert N., St. Louis
Tinsley, John C., Jr., Columbia
Tippett, Jack C., St. Louis
Titmarsh, J. B., Jr., Bethany
Titterington, Paul F., St. Louis
Tjoflat, Oliver E., St. Louis
Tobias, Norman, St. Louis
Todd, Thomas B., Nevada
Tomlinson, William L., St. Louis
Tonelli, George L., St. Louis
Tooker, Charles W., St. Louis
Torin, Bernice A., University City
Towers, Orville W., St. Charles
Townsend, James A., Clayton
Townsend, Vincent F., Clayton
Tracy, Herbert A., Belton
Treiman, Robert C., St. Louis
Tremain, Ernest E., Maplewood
Tremain, Irl G., St. Louis
Tribble, Robert E., Chaffee
Trigg, Joseph F., St. Louis
Tripodi, Anthony M., Tacoma, Wash.
(Member St. Louis Medical Society)
Trippe, Harrison C., Kansas City
Triska, Roland A., St. Louis
Trolinger, James H., Long Beach, Calif.
(Member Cape Girardeau County Medical Society)
Trotter, Francis O., Jr., St. Louis
Trowbridge, Barnard C., Kansas City
Trowbridge, Ellsworth H., Prairie Village, Kan.
(Member Jackson County Medical Society)
Trowbridge, Ellsworth H., Jr., Kansas City
Trueblood, Alva C., Jr., St. Louis
Trugly, Edith S., St. Louis
Trunko, Leo, Lemay
Tsang, John L. K., Springfield
Tucker, Eugene F., St. Louis
Tureen, Louis L., St. Louis
Turner, Glenn O., Springfield
Turner, James H., Poplar Bluff
Turner, James K., St. Louis
Turner, Percy C., Kansas City
Turner, Rush, St. Louis
Turner, William F., Poplar Bluff
Tutera, Dominic F., Kansas City
Tuthill, Herbert, Kansas City
Twedell, Donald L., St. Louis
Twin, Edward J., Kansas City
Twyman, Richard A., Kansas City
Tygett, Glenn J., Cape Girardeau

U

Uhlemeyer, Henry A., St. Louis
Ulett, George A., St. Louis
Ulett, Pearl C., St. Louis
Underwood, Dick H., Kansas City
Underwood, Harry A., Kansas City
Underwood, Johnson, Jr., Kansas City
Underwood, Millard K., Rolla
Underwood, Ross H., Kansas City
Unger, Harold, Kansas City
Ungvari, Joseph C., St. Louis
Unterberg, Hillel, St. Louis
Upshaw, Paul O., Springfield
Upsher, Albert E., Kansas City
Urban, Edgar D., Sikeston
Utley, James H., St. Louis
Utterman, William F., Perryville
Uyeno, Frank S., St. Louis

V

Vacca, Joseph B., San Antonio, Tex.
(Member St. Louis Medical Society)
Vail, A. Denton, Springfield
Valach, Frank J., Brentwood
Valentine, Herbert S., Kansas City
Van Biber, James T., Independence
Van Buskirk, Terrance E., Kansas City
Van Buskirk, William C., Kansas City
Van Cleve, John D., Malden
Vandiver, Virgil D., Chillicothe
Vandover, John T., St. Louis
Van Matre, R. M., Washington, D. C.
(Member St. Louis Medical Society)
Van Norman, Robert T., St. Louis
Vatterott, Paul B., St. Louis
Vaughan, J. Russell, St. Louis
Vaughn, Arthur N., St. Louis
Vaughn, James W., Kansas City
Venable, H. Phillip, St. Louis
Verda, Dominic J., St. Louis
Vermillion, Crofford O., St. Louis
Vescovo, Paul C., Jr., Smithville
Vest, James C., St. Louis
Vezeau, Stephan, St. Louis
Vilmer, Charles, Kansas City
Vincent, Jack C., Kansas City
Vinyard, Jack L., Carrollton
Vinyard, Paul, St. Louis
Virant, John A., St. Louis
Virden, Herbert H., Kansas City
Vitale, Anthony J., St. Louis
Vitali, Nicholas S., St. Louis
Vitt, Alvin E., St. Louis
Vitt, Edwin F., St. Louis
Viviano, Joseph G., St. Louis
Vizgird, Joseph J., St. Louis
Vogel, Eugene A., St. Louis
Vogt, William H., Jr., St. Louis
Vohs, Carl F., St. Louis
Vollmar, Clarence J., Webster Groves
Von Kaenel, Joseph E., St. Louis
von Ravenswaay, Theodore, Columbia
Votaw, Robert E., St. Louis
Voth, Harold W., Kansas City
Vournas, Christopher G., St. Louis

W

Wacker, Leo L., St. Louis
Waddle, Theodore L., Dexter
Wade, Frederick E., Kansas City
Wade, James P., St. Louis
Wadlow, Ernest E., St. Joseph
Wagenbach, William F., St. Louis
Waggoner, Charles M., Columbia
Waggoner, Sharon E., St. Joseph
Wakefield, Elmer G., Springfield
Wakefield, Franklin, Jr., Kansas City
Wakeman, Jasper N., Springfield
Wald, Stanley M., St. Louis
Walden, James M., Kansas City
Walk, Lloyd F., Belleville, Ill.
(Member St. Louis Medical Society)
Walker, Ambrose T., Mammoth Spring, Ark.
(Member South Central Counties Medical Society
Walker, Francis S., St. Louis
Walker, George S., Clinton
Walker, Harvey, Jr., St. Louis
Walker, Hugh B., Clinton
Walker, James C., Kansas City
Walker, John W., Kansas City
Walker, Orville C., Jr., Independence
Walker, Paul W., Joplin
Walker, Willard B., Clayton
Walker, William M., Springfield
Wall, Albert, St. Louis
Wall, Arthur H., Sierra Madre, Calif.
(Member Jackson County Medical Society)
Wall, Emmett D., St. Louis
Wall, Harry C., Kansas City
Wall, Joe A., Houston
Wall, Leonard A., Kansas City
Wallace, Edgar S., Mexico
Walsh, James W., St. Louis
Walsh, Theodore E., St. Louis
Walsh, Thomas J., St. Louis
Walsh, William T., Morgantown, W. Va.
(Member Greene County Medical Society)
Walter, Archie L., Sedalia
Walter, Kenneth E., St. Louis
Walters, Harold E., St. Louis
Walters, John H., Columbia
Walters, Laura, Columbia
Walters, William H., St. Louis
Walterscheid, John H., Hannibal
Walther, Roy A., Jr., St. Louis
Walton, Franklin E., St. Louis
Walton, Marion C., Mountain View
Waltrip, Roy T., Jr., Sikeston
Wanamaker, John M., Rock Port
Ward, Joe, Lexington
Ward, Robert L., Centralia
Ward, Robert L., Kansas City
Warner, George K., New Fairfield, Conn.
(Member St. Louis Medical Society)
Warner, Robert G., St. Louis
Warres, Herbert L., St. Joseph
Washburn, J. Loren, Versailles
Washington, Edward L., Columbia
Wasserman, Helman C., St. Louis
Waterman, Franklin M., Liberty
Waters, E. Burton, Kirkwood
Waters, Hugh R., St. Louis
Watkins, George L., Jr., Farmington
Watson, Cecil L., Kahoka
Watson, Ethel, Independence
Wattenberg, Carl A., St. Louis
Watts, Byron E., Jefferson City
Waxman, David, Kansas City
Waxman, Jane Z., Kansas City
Wayland, Thomas A., Camdenton
(Member Cole County Medical Society)
Webb, Leslie R., Jr., Springfield
Webb, Marion A., St. Louis
Webb, Paul B., St. Louis
Webb, Paul B., Jr., St. Louis
Webb, Paul K., St. Louis
Weber, Eugene P., St. Louis

Weber, Sol, St. Louis
Weber, William K., Bridgeton
Webster, Joseph G., Kansas City
Webster, Roger W., Hayward, Calif.
(Member Jasper County Medical Society)
Weed, Randal W., St. Joseph
Weeks, George R., Cape Girardeau
Weger, Carl C., Keytesville
Wegner, Carl R., St. Louis
Weiford, Edward C., Kansas City
Weiler, Thomas J., St. Louis
Weinel, Francis G., St. Louis
Weinhaus, Robert S., St. Louis
Weinsberg, William C., St. Louis
Weintraub, Solomon A., St. Louis
Weir, Don C., St. Louis
Weir, Royal A., St. Louis
Weis, Matthew W., St. Louis
Weisbrod, Wilfred B., St. Louis
Weisman, Renate D., St. Ann
Weisman, Sol, St. Louis
Weiss, James M. A., Columbia
Weiss, Richard S., St. Louis
Weiss, Robert M., Sacramento, Calif.
(Member St. Louis Medical Society)
Weitman, Maximilian, St. Louis
Welch, Hooper W., St. Louis
Welker, Joseph E., Kansas City
Well, Julius W., Palmyra
Wells, John H., Kansas City
Welsh, Laurence C., St. Louis
Weltscheff, Christo A., Grandview
Wempe, G. Raymond, Maryville
Wenneker, Alvin S., St. Louis
Wennerman, Sam F., St. Louis
Wentzel, Louis R., St. Louis
Wepprich, Michael S., Washington
Werner, Dean F., North Kansas City
Werner, Franklin C., North Kansas City
Werner, William A., St. Louis
Werth, Duncan S., Glendale
West, Joseph W., St. Louis
Westerman, Henry C., University City
Westrup, Arthur W., Webster Groves
Westrup, Ellsworth A., Webster Groves
Wetzel, Fred S., Jr., Carthage
Weyerich, Leon F., St. Louis
Wheeler, Charles B., Kansas City
Wheeler, John H., Kansas City
Whitaker, Topsy T. H., East Prairie
White, Charles H., Prairie Village, Kan.
(Member Jackson County Medical Society)
White, George A., Kansas City
White, Orville O., St. Louis
White, R. Ned, Springfield
White, Stoughton F., Kansas City
White, William E., Kansas City
White, William H., Jr., Clayton
Whitehead, Frank F., Neosho
Whiteman, John R., Kansas City
Whitener, Milles C., St. Louis
Whitener, Paul R., St. Louis
Whitman, Doyle C., Kansas City
Whitmore, J. Stewart, Shawnee Mission, Kan.
(Member Jackson County Medical Society)
Whitsell, Ora E., St. Joseph
Whitten, Marion F., Carthage
Whittico, James M., St. Louis
Wick, Quintin J., Highland, Ill.
(Member St. Louis Medical Society)
Wicks, Mary R., Pittsburgh, Pa.
(Member St. Louis Medical Society)
Wiedershine, Leonard J., St. Louis
Wiegand, Herbert C., St. Louis
Wieman, Harry K., Joplin
Wien, Irving A., Kansas City
Wiener, Meyer, Coronado, Calif.
(Member St. Louis Medical Society)

Wiese, Harry W., St. Louis
Wiggins, Roland L., Columbia
Wilbur, David G., Houston
Wilcox, Claude V., St. Louis
Wilcoxen, William B., Bowling Green
Wild, Aloysius A., St. Louis
Wiles, Jack N., West Plains
Wilhelm, Warren F., Kansas City
Wilhelmi, Otto J., Webster Groves
Wilkinson, Charles B., Kansas City
Wilkinson, Everett A., Kansas City
Will, Leo A., Murray, Ky.
(Member St. Louis Medical Society)
Williams, Charles S., Malden
Williams, Delon A., Kansas City
Williams, Edward B., Jr., St. Louis
Williams, Frank R., Kansas City
Williams, George P., Kansas City
Williams, John M., Liberty
Williams, John W., Oak Grove
Williams, John W., Springfield
Williams, John W., Jr., Springfield
Williams, Joseph C., Jr., Kansas City
Williams, Kirkley R., St. Louis
Williams, Luke E., Kansas City
Williams, Ray D., St. Louis
Williams, Robert A., Kansas City
Williams, Robert S., Mexico
Williams, Roland D., Kansas City
Williams, Starks J., Kansas City
Williams, Vincent T., Kansas City
Williams, W. A., Jr., Cape Girardeau
Williamson, George L., Kansas City
Williamson, Oscar E., St. Louis
Williamson, Walter E., St. Louis
Willis, Norman E., Poplar Bluff
Willits, Lyle G., Kansas City
Willman, Charles R., St. Joseph
Willman, Vallee L., St. Louis
Willoughby, James W., Liberty
Willoughby, Jean B., Kansas City
Willumsen, Henry C., St. Joseph
Wilson, Alice H., Joplin
Wilson, Charles F., Cape Girardeau
Wilson, Clifford C., Kansas City
Wilson, Daniel R., Mount Vernon
Wilson, Fred K., Winston
Wilson, Hester J., Kansas City
Wilson, Hugh M., St. Louis
Wilson, John E. West Plains
Wilson, Keith S. St. Louis
Wilson, Kenneth O., St. Louis
Wilson, Loys C., Kennett
Wilson, Vernon E., Columbia
Wilson, Virgil R., Rosendale
Wilucki, Leo E., St. Louis
Wilucki, Melvin R., St. Louis
Wimp, Jesse J., Kirksville
Windhorst, Dorothy B., St. Louis
Windmiller, Myrl E., Columbia
Winegar, Alvon C., Jefferson City
(Member Greene County Medical Society)
Winer, Herbert, J., Kansas City
Winkelman, Esther B., Kansas City
Winn, George W., Boonville
Winokur, George, St. Louis
Winston, Bernard H., Kansas City
Winter, Tyrus D., St. Louis
Winterer, Roland A., St. Louis
Winters, Kathleen, St. Louis
Wippo, Edgar W., St. Louis
Wirthlin, Edward H., St. Louis
Wise, George W., Kansas City
Wise, Gordon F., Springfield
Wissmath, Frank S., Clayton
Wissner, Seth, St. Louis
Withers, Orval R., Kansas City
Withrow, John B., Kansas City
Witt, Clyde M., St. Louis
Witt, Frederick W., St. Louis
Wittler, Harry A., Brentwood

Wittmer, S. C., Springfield
Wolf, Jack W., Kansas City
Wolff, Paul G., Cape Girardeau
Wolfram, Philip H., Smithville
Woltzen, Simon W., Clinton
Wommack, Fred L., Crane
Wood, Bennett R., St. Louis
Wood, George F., Fulton
Wood, George H., Carthage
Wood, James A., Clayton
Wood, William W., Springfield
Woodruff, Frederick E., St. Louis
Woods, Harold V., Blue Springs
Woods, Walton C., Kansas City
Woodward, William W., Independence
Wooldridge, Bart F., Joplin
Wooldridge, W. E., Springfield
Woolf, Ralph B., St. Louis
Workman, George M., Hermann
Worley, Charles A., Sweet Springs
Wortmann, Robert F., Kansas City
Wotawa, William J., St. Louis
Wray, Rolla B., Nevada
Wright, George W., Webb City
Wright, John L., Poplar Bluff
Wright, Robert P., Kansas City
Wu, William Q., Kansas City
Wulff, George J. L., Jr., St. Louis
Wyatt, Lois C., Kirkwood

Y

Yaeger, Gerald A., St. Louis
Yancey, Daniel L., Springfield
Yanow, Mitchell, Clayton
Yates, J. Lewis, Mt. Vernon
Yohe, Ruth M., Kansas City
Yore, Richard W., St. Louis
Yoskit, Harry, Festus
Yost, Walter B., St. Louis
Young, Calvin C. Jr., Joplin
Young, James E., Kansas City
Young, Jesse W., Kansas City, Kan.
(Member Jackson County Medical Society)
Young, John S., St. Louis
Young, Leo P., St. Louis
Young, Robert B., Rolla
Young, Robert H., Moberly
Younge, Walter A., St. Louis
Younger, Anita, St. Louis
Younger, Ernest, St. Louis
Yuan, Louis S. K., St. Louis

Z

Zacharias, David L., Kansas City
Zahorsky, John, Steelville
Zahorsky, Theodore S., St. Louis
Zahrt, Frank H., Princeton
Zeffren, Joel L., Clayton
Zeinert, Oliver B., University City
Zeitler, Walter A., Jennings
Zeitler, William T., St. Louis
Zellermayer, Jacob, Kansas City
Zentay, Paul J., St. Louis
Ziegler, Allan M., Prairie Village, Kan.
(Member Jackson County Medical Society)
Ziegelmeyer, John S., St. Louis
Ziegler, Dewey K., Kansas City
Zillgitt, George H., St. Louis
Zimmerman, Herbert B., Olivette
Zimmerman, Joseph A., Kennett
Zingale, Frank G., St. Louis
Zink, Oscar C., St. Louis
Zuber, Harold V., Kansas City
Zuckner, Jack, St. Louis
Zwart, Claude H., St. Louis
Zwirn, Benjamin H., Florissant

List of Members by County Societies

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(North Central Counties Medical Society)

ANDREW COUNTY MEDICAL SOCIETY

Baker, Warren C., Savannah
Kelley, Gilbert B., Savannah
Kelley, Ralph R., Savannah
Long, Forrest C., Savannah
Wilson, Virgil R., Rosendale

ATCHISON COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth Counties Medical Society)

AUDRAIN COUNTY MEDICAL SOCIETY

Bland, Warren W., Vandalia
Coil, Paul E., Mexico
Davis, Leonard L., Jr., Mexico
Dwyer, Thomas L., Mexico
Ector, Henry J., Mexico
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Gantt, Ernest S., Jr., Mexico
Garcia, Charles L., Mexico
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Kallenbach, G. P., Mexico
Lankford, Harold D., Mexico
O'Brien, Harry F., Mexico
Rodes, Ned D., Mexico
Rouse, David M., Mexico
Shaw, Gordon, Mexico
Wallace, Edgar S., Mexico
Williams, Robert S., Mexico

BARRY COUNTY
(Ozarks Medical Society)

BARTON-DADE COUNTY MEDICAL SOCIETY

Arnold, Herbert M., Lamar
Bickel, Vern T., Lamar
Cain, Alvin R., Lamar
Carroll, Thomas W., Lamar
Cowan, Watt O., Greenfield
Guldner, Edmond, Lamar
McNeel, Lee A., Jr., Greenfield
Taylor, Elmer W., Lockwood

BATES COUNTY
(West Central Missouri Medical Society)

BENTON COUNTY MEDICAL SOCIETY

Logan, James A., Warsaw

BOLLINGER COUNTY
(Unorganized)

BOONE COUNTY MEDICAL SOCIETY
(Columbia)

Allen, Horace E., Professional Bldg.
Allen, Joseph E., Professional Bldg.
Allen, William C., 2401 Highland Dr.
Almond, Carl H., 807 Stadium Rd.
Anast, Constantine S., 700 Thilly Ave.
Asel, Norman D., Medical Center
Baker, James M., 16 S. 10th St.
Battersby, Richard S., 203 Westwood Ave.
Bivings, F. Gary, 306 Maplewood Dr.
Black, Samuel P. W., 300 S. Glenwood St.
Brooke, Clement E., 901 Edgewood St.
Brukardt, Diane, Student Health Service
Bruner, Claude R., Professional Bldg.
Buesseler, John A., Medical Center
Bumgarner, James E., 1504 E. Broadway
Bumgarner, Roger W., 1723 Amelia St.
Burns, Thomas W., 100 Westwood Ave.
Calise, Peter J., 67 East Dr.
Chalkley, Judson I., Boone County Hospital
Chiasson, E. Chaille, Guitar Bldg.
Cochran, Donald O., Medical Center
Cooper, Maurice E., 1000 Wayne Rd.
Cope, James C., 1504 E. Broadway
Darnell, Thomas F. B., Doctors Clinic Bldg.
Denninghoff, James C., 202 S. Tenth St.
Dexheimer, Frank R., Professional Bldg.
Dietrich, Karl D., Professional Bldg.
Eggers, George W. N., Jr., 807 Stadium Rd.
Evans, Alden M., Ellis Fischel State Cancer Hospital
Freeman, Robert F., 1621 E. Broadway
Fuchs, George J., Jr., 1026 Hickory Hill Dr.
Galeota, William R., Student Health Service
Garrett, Glen H., Professional Bldg.
Gaunt, William D., Medical Center
Hall, David G., 807 Stadium Rd.
Hardwicke, Henry M., Division of Health, Jefferson City
Jackson, Robert L., Medical Center
Johnson, Richard E., Ellis Fischel State Cancer Hospital
Keats, Theodore E., 624 Lakeshore Dr.
Keown, Kenneth K., Medical Center
Kubin, Milford T., Ellis Fischel State Cancer Hospital
Lachance, Leopold, Centralia
Ladenson, Roland P., 16 S. Tenth St.
Lamke, Charles M., Professional Bldg.
Landor, John H., 807 Stadium Rd.
Leech, Charles A., Guitar Bldg.
Lewis, Ray B., 2012 Valley View Dr.
Lodwick, Gwilym S., 208 Ridgeley Rd.
Logue, John T., 1504 E. Broadway
Lowney, John F., Student Health Service
Lucas, Fred V., 807 Stadium Rd.
McElroy, Glenn L., 909 University Ave.
Martt, Jack M., University Hospitals
Miller, Leroy J., Guitar Bldg.
Modlin, John J., 706 Thilly Ave.
Moranville, Benedict A., 1504 E. Broadway
Neal, M. Pinson, Medical Center
Overholser, Milton D., Medical Center
Payne, John W., Professional Bldg.
Perna, Vincent P., Medical Center
Pickard, Clarence M., 3 West Blvd., North
Pingelton, William B., 1006 Cherry St.
Plumlee, John E., 807 Stadium Rd.
Porterfield, John F., 2208 Washington Ave., Silver Spring, Md.
Ransdell, James F., 25056 Solo Rd., Hayward, Calif.
Ray, C. Thorpe, Medical Center
Roark, Glenn E., Student Health Service
Rodgers, Elrie P., Box 157
Sala, Jose M., Ellis Fischel State Cancer Hospital
Scheuber, Charles, 1504 E. Broadway
Schewe, Elmer J., Jr., 55 Sunset Dr.
Schultz, Loraine E., Boone County Hospital
See, William B., Professional Bldg.
Sheppard, Lee C., Jr., 2776 Worden St., San Diego 10, Calif.
Sights, Warren P., Jr., 807 Stadium Rd.
Simpson, Lloyd, 503 Stewart Rd.
Smith, Grafton A., 1019 Hickory Hill Dr.
Smith, Jason N., Jr., 701 West Blvd., S.
Smith, Joe R., Professional Bldg.
Spurgeon, Milo J., 404 Edgewood Ave.
Stephenson, Hugh E., Jr., Medical Center
Stewart, William J., 909 University Ave.
Stine, Dan G., 1215 Francis Dr.
Suggett, Finis C., 805 Broadway
Thomas, Horace E., 909 University Ave.
Thompson, Ian M., Medical Center
Tinsley, John C., Jr., 16 S. Tenth St.
VonRavenswaay, Theodore, 2005 Parkade Ave.
Waggoner, Charles M., Professional Bldg.
Walters, John H., Guitar Bldg.
Walters, Laura, Guitar Bldg.
Ward, Robert L., Centralia
Washington, Edward L., 1504 E. Broadway
Weiss, James M. A., Medical Center
Wiggins, Roland L., 201 North Third St.
Wilson, Vernon E., Medical Center
Windmiller, Myrl E., Guitar Bldg.

BUCHANAN COUNTY MEDICAL SOCIETY
(St. Joseph)

Allain, James J., 902 Edmond St.
Allaman, John M., 439 Acacia Dr., Sarasota, Fla.
Ames, William H., 902 Edmond St.
Augustine, Robert W., 902 Edmond St.
Bascom, Charles H., State Hospital No. 2
Beck, Leroi, 1618 N. Third St.
Beck, Paul M., Kirkpatrick Bldg.
Benson, Scott C., 324 N. 6th St.
Berney, Francis J., 1402 Faraon St.
Boteler, George M., Howitt Bldg.
Bristow, Robert B., Physicians & Surgeons Bldg.
Butler, E. F., 902 Edmond St.
Carpenter, George T., 902 Edmond St.
Chiarottino, Joseph F., Doctor's Bldg.
Christ, Martin H., 6106 King Hill Ave.
Craig, Owen W. D., Tootle Bldg.
Day, Maxwell, Schneider Bldg.
DuMont, Clement C., 1905 Francis St.
Ferguson, Luther J., 2907 Francis St.
Fisher, Joseph L., 7th & Jule Sts.
Forgrave, John R., 420 N. 8th St.
Forgrave, Leon P., 420 N. 8th St.
Forman, George W., P.O. Box 747
Fuson, Levi H., Kirkpatrick Bldg.
Grant, Claude S., Doctor's Bldg.
Greenberg, Charles, 938 Hilgard Ave., Los Angeles 24, Calif.
Grimes, M. E., Kirkpatrick Bldg.
Handler, Eric, Physicians & Surgeons Bldg.
Harner, Casper G., 902 Edmond St.
Herman, Allen I., Physicians & Surgeons Bldg.
Howden, Thomas L., Kirkpatrick Bldg.
Hughes, Judson M., Kirkpatrick Bldg.
Hunt, William J., 2600 Pacific St.
Ide, Lucien W., P.O. Box 747
Kieber, Robert W., Kirkpatrick Bldg.
Knepper, P. A., Box 747
Kulowski, Jacob, 1402 Faraon St.
Lau, Gustav A., Kirkpatrick Bldg.
Lee, Carleton H., 2403 Frederick Ave.
Lockhart, William G., 902 Edmond St.
McDaniel, John R., 902 Edmond St.
McDonald, Wilbur P., 301 N. 8th St.
McGlothlan, Arthur B., 821 N. 24th St.
Maginn, Richard L., Physicians & Surgeons Bldg.
Martin, John N., Physicians & Surgeons Bldg.
Meluney, S. E., Kirkpatrick Bldg.
Minton, Robert S., Corby Bldg.
Moen, Berwyn H., 902 Edmond St.
Morse, Marvin, 2702 Faraon St.
Mothershead, John L., 2603 Frederick
Muench, Albert H., Physicians & Surgeons Bldg.
Mundy, Homer F., 2801 Sacramento St.
Nelson, Fred L., 902 Edmond St.
Ness, Carl K., 902 Edmond St.
O'Connor, William B., Kirkpatrick Bldg.
Patersen, H. E., 2401 Frederick Ave.
Pettit, Manson B., Box 263
Pfeffer, Robert I., 1915 N. 29th St.
Pifer, Lawrence H., 1302 Faraon St.
Potter, Caryl A., Jr., Physicians & Surgeons Bldg.
Potter, Thompson E., 731 Faraon St.
Redmond, William, Corby Bldg.
Riddell, Richard V., 902 Edmond St.
Rogers, John T., 2502 Ashland Ave.
Rosenthal, Irwin I., 2715 Union St.
Rost, William B., 2221 N.W. Extension Blvd.
Roundy, Collis I., Kirkpatrick Bldg.
Ryan, John H., 301 N. 8th St.
Senne, Herbert C., 223 North 7th St.
Senor, Samuel E., 722½ Francis St.
Shevlin, Charles F., 902 Edmond St.
Smith, Clifton, 2821 Ashland Ave.
Stacy, Winton T., 900 Ashland Ct.
Stallard, Donald J., 902 Edmond St.
Tadlock, Baxter W., 2727 Jule St.
Tahir, Mohammad, Box 66, Wyatt Pk.
Teare, Max E., 1542 East 50th Tr., Kansas City
Thomas, Forrest, State Hospital No. 2
Thompson, F. Gregg, Jr., P.O. Box 830
Thompson, F. Gregg, III, 902 Edmond St.
Wadlow, Ernest E., Kirkpatrick Bldg.
Waggoner, Sharon E., 301 Illinois Ave.
Warres, Herbert L., 902 Edmond St.
Weed, Randal W., 702 Jule St.
Whitsell, Ora E., 824 Edmond St.
Willman, Charles R., Kirkpatrick Bldg.
Willumsen, Henry C., 902 Edmond St.

BUTLER-WAYNE-RIPLEY COUNTY MEDICAL SOCIETY
(Poplar Bluff)

Barbour, Marvin R., Kneibert Clinic
Beecher, Sheldon B., 1517 Rosedale St.
Biggs, Fred J., Jr., Kneibert Clinic
Boone, Richard, N.E. Florida State Hospital, Macclenny, Fla.
Brandon, Walter L., P.O. Box 407
Brookreson, Alton F., 321 Oak St.
Burcham, Tom R., Jr., Doniphan
Canlas, Emilio M., 705 Pine Blvd.
Clay, Hampson S., 218 N. Broadway
Cline, Edward W., 954 Mary St.
Cline, Harold H., Piedmont
Dinelli, Frank E., 215 Oak St.
Englehardt, Robert C., Kneibert Clinic
Gernstetter, Sangwill L., P.O. Box 473
Hansbrough, Eugene T., 623 Pine Blvd.
Harwell, James L., 203 S. Main St.
Harwell, J. Lester, 1311 N. Main St.
Henrickson, Hardin M., 215 Oak St.

Henrickson, Hardin O., 215 Oak St.
Johnson, Frank C., Doniphan
Kneibert, Fred L., Kneibert Clinic
Loughead, John R., West Maude St.
McLain, B. M., 724 Cynthia St.
McPheeters, James W., Sr., 330 N. 2nd St.
Macauley, Bernard J., 215 Oak St.
Malinoski, Mitchell V., Veterans Hospital
Markel, Arthur D., Kneibert Clinic
May, Albert L., Jr., 330 N. 2nd St.
Miller, David V., Kneibert Clinic
Parker, Arthur C., Jr., Kneibert Clinic
Post, Cyril A., 123 S. Broadway
Riggs, Orval E., 217 Oak St.
Robertson, William D.,
Ruff, T. Eugene, Kneibert Clinic
Turner, James H., 217 Oak St.
Turner, William F., 217 Oak St.
Willis, Norman E., 218 N. Broadway
Wright, John L., 320 N. 2nd St.

CALDWELL COUNTY
(Grand River Medical Society)

CALLAWAY COUNTY MEDICAL SOCIETY
(Fulton)

Baur, Alfred K., State Hospital 1
Brown, John J., 101 E. 6th St.
Cremer, William J., State Hospital 1
Crews, Robert N., 612 Court St.
Durst, Henry, 610 Court St.
Freund, H. G., State Hospital 1
Gish, Rutledge, 5 E. 5th St.
Groce, George, 607 Court St.
Hall, Robert G., 4406 McPherson Ave., St. Louis
Hill, James E., 607 Court St.
Hunter, James R., Webster Groves
Jackson, Vernon B., 407a Court St.
Kepler, Earl C., State Hospital 1
Nichols, Frank J., State Hospital 1
Price, Robert P., State Hospital 2, St. Joseph
Ritterbusch, James K., State Hospital 1
Robertson, Robert C., 403 River Rd., Fair Haven, N. J.
Rusk, Earl M., New Bloomfield
Sydow, Henry A., 1201 Grand Ave.
Tellez, Edward R., 207 Lynn Ave.
Wood, George F., 614 Market St.

CAMDEN COUNTY

Garrison, T. W., Camdenton (Member Mid-Missouri County Medical Society)
Holley, Donald B., Camdenton (Member Mid-Missouri County Medical Society)
Wayland, Thomas A., Camdenton (Member Cole County Medical Society)

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY
(Cape Girardeau)

Ashley, Hugh V., 234 N. Sprigg St.
Ashley, Hugh, Jr., 234 N. Sprigg St.
Bahn, Charles F., 1902 W. Broadway
Barnes, Seth S., 1854 Broadway
Campbell, Edward D., 937 Broadway
Chapman, Jean A., 1902 Broadway
Cochran, Jo R., 24 N. Sprigg St.
Crites, Edward, Sedgewickville
Crowe, John T., 937 Broadway
Drace, James J., 903 Bellevue Blvd.
Elrod, Dennis B., 1912 Broadway
Estes, Albert M., 714 Broadway
Ford, Walter W., Gordonville
Hall, Frank W., 1912 Broadway
Hecker, J. E., Jackson
Herbert, Charles T., 824 Good Hope St.
Hoxworth, Gerald M., 24 N. Sprigg St.
Jaeger, Joseph N., Jackson
Johnson, Earl W., 937 Broadway
Juden, Alexander G., 4 S. Spanish St.
Jung, J. Marshall, Illmo
Kasten, Melvin C., 1453 Themis St.
Keim, John H., 230 N. Sprigg St.
Kinder, James A., 937 Broadway
Kratz, Paul E., 1912 Broadway
Lovinggood, Thomas A., 649 Sylvan Lane
McDonald, Eugene F., Jackson
McGinty, Charles P., 1912 Broadway
Nunnelly, Gordon M., 1924 Broadway
Nussbaum, Paul B., 1858 Broadway
Oehler, William F., 234 N. Middle St.
Otto, Thomas G., 1912 Broadway
Rapp, Harold B., 1011 N. Henderson St.
Rawlins, Fred E., 1607 Berthing St.
Reynolds, Garland A., 826 Themis St.
Ridings, Harold D., 937 Broadway
Ritter, Raymond A., 1912 Broadway
Seabaugh, D. Rusby, 219 N. Pacific St.
Seabaugh, Dayton I. L., Jackson
Seabaugh, L. R., 219 N. Pacific St.
Seabaugh, Oda L., 24 N. Sprigg St.
Seabaugh, William O. L., 24 N. Sprigg St.
Shoss, Milton, Medical Arts Bldg.
Trolinger, J. H., 1812 East Ocean Blvd., Long Beach, Calif.
Tygett, Glenn J., 215 N. Sprigg St.
Weeks, George R., 2850 Lear Dr.
Williams, W. A., Jr., 24 N. Sprigg St.
Wilson, Charles F., 714 Broadway
Wolff, Paul G., 1819 Broadway

CARROLL COUNTY
(Grand River Medical Society)

CARTER-SHANNON COUNTY MEDICAL SOCIETY

Rollins, H. D., Winona

CASS COUNTY
(West Central Missouri Medical Society)

CEDAR COUNTY
(West Central Missouri Medical Society)

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

Arnold, Eugene L., Jefferson Barracks
Baker, Josephine D., Moberly
Barnett, Floyd A., Paris
Campbell, James E., Macon
Chute, W. Deward, Moberly
Cohrs, Clarence C., Moberly
Collins, Gretchen D., Macon
Dreyer, Philip V., Huntsville
Eggleston, Donald E., Macon
Fleming, J. Will, Jr., Moberly
Fleming, Thomas S., Moberly
Harms, Florian L., Salisbury
Hasson, Robert, Moberly
Huber, Lasley E., Moberly
Johnson, Edward M., U. S. Army Hospital, Ft. Campbell, Ky.
Miller, D. Herbert, Perry Hill Road, Montgomery, Ala.
Miller, Howard S., Macon
Musson, E. K., Department of Public Health, Clovis, New Mexico
Pemberton, Charles W., Mendon
Ragsdale, George M., Paris
Rice, Grover C., Brunswick
Rinker, Carl T., Jr., Macon
Rowlette, Avery P., Moberly
Smith, Carl C., Moberly
Streetor, Roderick D., 1332 Blackstone Ave., St. Louis
Stuart, Daniel D., Brunswick
Szymanski, Stanley R., Moberly
Weger, Carl C., Keytesville
Young, Robert H., Moberly

CHRISTIAN COUNTY
(Ozarks Medical Society)

CLARK COUNTY
(Lewis-Clark-Scotland County Medical Society)

CLAY COUNTY MEDICAL SOCIETY

Adams, Howard D., 114 N. Water St., Liberty
Allan, James R., 110 E. Broadway, Excelsior Springs
Allen, S. Lloyd, Parkville
Baird, J. Edward, Excelsior Springs
Bates, George C., 2730 S. Mall St., Kansas City
Boone, Daniel S., 3329 Mohawk Lane, Kansas City
Bowles, Richard P., 112 N. Water St., Liberty
Bruce, Paul C., Excelsior Springs
Chastain, Maurice W., 2016 Swift St., N. Kansas City
Chiles, David R., Smithville
Cox, William L., 101 W. Kansas St., Liberty
Dunham, R. H., 2025 Swift Ave., N. Kansas City
Dwyer, Reinhardt D., 1806 Swift Ave., N. Kansas City
Edwards, Theodore F., 329 Armour Blvd., N. Kansas City
Fischer, Edward H., 306 E. 21st Ave., N. Kansas City
Fowler, I. Charles, 2025 Swift Ave., N. Kansas City
Gauer, Robert J., 3916 N. Sherwood Dr., Kansas City
Gay, Elmer E., Richmond
Goodson, William H., Liberty
Hayes, Lawrence L., 1508 E. 51st St., Kansas City
Hendren, Glenn W., Liberty
Hobbs, Earl B., Smithville
Hodge, Robert H., 329 Armour Road, N. Kansas City
Houck, Russell M., V. A. Hospital, Kecoughtan, Va.
Knox, Earl R., Rialto Bldg., Kansas City
Kratz, Frederick W., 1927 W. 152 Highway, Liberty
Kuenzi, Donald E., 8400 N. Oak St., Trwy., N. Kansas City
Langhus, Melvin O., Route 4, N. Kansas City
Lewis, Albert G., Main & Mill Sts., Smithville
Love, Drury M., 613 E. 66th St., Kansas City
McCormich, James E., 4030 N. Oak St., Kansas City
McCracken, Samuel R., 107 W. Spring St., Excelsior Springs
Mullins, Bernard L., 1806 Swift Ave., N. Kansas City
Musgrave, David E., Excelsior Springs
Nicholson, Ralph L., 116 South St., Excelsior Springs
Parker, Robert H., 2005 Fayette Ave., N. Kansas City
Pate, O. S., Pioneer Bldg., N. Kansas City
Perry, Lawrence L., Jr., 2025 Swift Ave., N. Kansas City
Petersen, Eugene G., 6708 N. Oak St., Trwy., Kansas City
Pileggi, Felix A., R.R. 4, Brady Hills, N. Kansas City
Porter, Russell C., 831 N. Camino Miramonte, Tucson, Ariz.
Revare, Paul, 2025 Swift Ave., N. Kansas City
Roberts, L. Marvin, 1906 Erie St., N. Kansas City
Robichaux, Eugene B., 116 South St., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Sanders, George E., 116 South St., Excelsior Springs
Sawyer, Floyd E., 329 Armour Road, N. Kansas City
Schertz, Truman B., 2007 Fayette St., N. Kansas City
Spelman, Archibald E., Smithville
Sportsman, Weldon L., 6309 N. Grand Ave., Kansas City
Vescovo, Paul C., Smithville
Waterman, F. M., Liberty
Werner, Dean F., 2025 Swift Ave., N. Kansas City
Werner, Franklin C., 1906 Erie St., N. Kansas City
Williams, John M., 32 South Main St., Liberty
Willoughby, James W., 114 N. Water St., Liberty
Withrow, John B., 2730 S. Mall St., Kansas City
Wolfram, Philip H., Smithville
Zacharias, David L., 6708 N. Oak St., Kansas City

CLINTON COUNTY MEDICAL SOCIETY

Kimes, Ira D., Cameron
Luckenbill, Paul T., Plattsburg
Mabrey, John P., Plattsburg
Netherton, George F., Cameron
Spalding, Wilber B., Plattsburg

COLE COUNTY MEDICAL SOCIETY
(Jefferson City)

Belden, Edgar A., State Office Bldg.
Belinson, Louis, State Office Bldg.
Bowe, Edwin E., 401 N. Ridgway St.
Bruce, James G., Central Missouri Trust Bldg.
Clark, Kendall A., 515 East High St.
Cox, William A., 125 E. High St.
Dorris, Richard P., Trust Bldg.
Duval, Addison M., Division of Mental Health
Enloe, Lawrence D., Trust Bldg.
Exon, C. Stuart, 515 East High St.
Garner, Lynn M., State Division of Health
Gordon, James S., 515 East High St.
Guhleman, Henry V., Jr., Medical Arts Bldg.
Gurnee, Landon H., 515 East High St.
Handler, Fred P., 95 Circle Dr.
Kanagowa, Hajime H., Medical Arts Bldg.

Kelly, Marshall W., 507 East High St.
Klebba, Larry B., P.O. Box 403
Leslie, J. Paul, 929 Fairmount Blvd.
Leslie, J. T., 933 Fairmount Blvd.
Leslie, James T., Jr., 213 Jackson St.
Loyd, Earl L., 515 East High St.
Loyd, Herlan O., 515 East High St.
McHaney, John W., 606 East High St.
McKnelly, William V., 507 East High St.
Mansur, Edward E., 2012 N.W. 13th St., Miami, Fla.
Matthews, John I., 302 Bolivar St.
Maxey, Hugh W., Box 236
Meier, Francis X., 1913 Haysilton Dr.
Meinershagen, Charles W., 138 Forest Pl.
Ossman, Julian A., 2030 W. Main St.
Richardson, R. G., 421 Lafayette St.
Russell, Joseph P., State Office Bldg.
Sennott, John S., 515 East High St.
Shull, George D., 521 East High St.
Stauffer, Harry B., Central Trust Bldg.
Stephan, August P., 98 W. Circle Dr.
Stricker, Harold C., 515 East High St.
Sugarbaker, Everett D., 503 East High St.
Summers, Joseph S., Jr., 515 East High St.
Tanner, Robert H., 1608 Greenberry Rd.
Taylor, Leon A., 129 East High St.
Tietjen, Frederick O., 213 Jackson St.
Watts, Byron E., 515 East High St.
Wayland, Thomas A., Box 239, Camdenton

COOPER COUNTY MEDICAL SOCIETY
(Boonville)

Abele, William A., 329 Main St.
Avery, Willard B., 329 Main St.
Beckett, Theodore C., 317½ Main St.
Boley, James O., 3200 E. Meyer Blvd., Kansas City
Chamberlain, Gilbert L., 315 Center Ave.
Diekroeger, Manuel L., R.D. 1
Friedrichs, Vernon D., Pilot Grove
Hata, Daikichi, 329 Main St.
Humphreys, Edward T., 329 Main St.
Sandy, Charles, 4209 W. 70th St., Prairie Village, Kan.
Stuart, Byron M., 329 Main St.
Winn, George W., 329 Main St.

CRAWFORD COUNTY
(Mid-Missouri County Medical Society)

DADE COUNTY
(Barton-Dade County Medical Society)

DALLAS-HICKORY-POLK COUNTY MEDICAL SOCIETY

Barnett, C. H., Bolivar
Brooks, John M., 840 S. Pickwick St., Springfield
Griffin, Mary E. P., Buffalo
Griffin, Olin A., Jr., Buffalo
Harrell, Henry J., Morrisville
Koon, Ben., Bolivar
McCraw, Doyle C., Bolivar
Robinson, George G., Humansville

DAVIESS COUNTY
(Grand River Medical Society)

DEKALB COUNTY
(Grand River Medical Society)

DENT COUNTY
(Mid-Missouri County Medical Society)

DOUGLAS COUNTY
(South Central Counties Medical Society)

DUNKLIN COUNTY MEDICAL SOCIETY

Baldwin, Paul, Kennett
Beal, Homer, Malden
Benson, Leo J., Jr., Kennett
Cash, Charles R., Kennett
Croom, Dorwyn W., Malden
Dempsey, D. T., Kennett
Dunshire, George Q., Kennett
English, Wallace D., Cardwell
Fuzzell, Jameso, 5702 W. Monterosa, Glendale, Ariz.
Green, Robert S., Kennett
Hopkins, F. G., Gideon
Merryman, Charles H., Senath
Miltenberger, Paul C., Kennett
Morehead, William E., Kennett
Palenske, Robert L., Hornersville
Peck, Chester R., Jr., Kennett
Rutledge, William J., Campbell
Spence, Elbert L., Kennett
Tarver, Quinton, Kennett
Van Cleve, John D., Malden
Williams, Charles S., Malden
Wilson, Loys C., Kennett
Zimmerman, Joseph A., Kennett

FRANKLIN-GASCONADE-WARREN COUNTY MEDICAL SOCIETY

Bonney, Samuel C., Washington
Bozzo, Raymond J., Washington
Brenner, Paul A., Owensville
Crawford, Robert M., Sullivan
de la Torre, John J., Sullivan
Denny, Hubert M., Union
Eisenmann, Benjamin P., New Haven
Eyermann, H. Walter, Warrenton
Hoelscher, Harold F., Warrenton
Johnson, Grover C., Marthasville
Mays, Frank G., Washington
Muench, Ludwig O., Washington
Pearl, John F., St. Clair
Post, J. P., Washington
Richardson, George A., Union
Richardson, William R., Union
Royse, Roy P., Sullivan
Ryan, John B., Washington
Schmidt, Charles A., Gerald
Schmidt, Herbert H., Washington
Shaw, Carvel T., Hermann
Shea, James G., Gerald
Steinbeck, Herbert D., Union
Strehlman, Benjamin G., Union
Wepprich, Michael S., Washington
Workman, George M., Hermann

GASCONADE COUNTY
(Franklin-Gasconade-Warren County Medical Society)

GENTRY COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

GRAND RIVER MEDICAL SOCIETY
(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Lynn-Mercer-Dekalb Counties)

Allen, Erroll W., Carrollton
Bales, Eugene L., Carrollton
Bohnsack, Ralph W., Brookfield
Booth, Herbert R., Hamilton
Breid, Jacob, Trenton
Brennan, Raymond J., Chillicothe
Brewer, Lake, Ridgeway
Brownfield, Samuel T., Brookfield
Broyles, Watkins A., Bethany
Carpenter, George W., Chillicothe
Carter, Howard, Hamilton
Clark, Chester L., Trenton
Conrad, Joseph, Chillicothe
Cullers, Charles H., Trenton
Daley, Frank R., Hamilton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Duffy, Oliver F., Trenton
Ellsworth, Willard, Cainsville
Fair, William L., Chillicothe
Fuson, William A., Trenton
Gale, Joseph F., Chillicothe
Gary, George, Marceline
Gearhart, M., Bethany
Haskell, Ralph E., Norborne
Horner, Glennon A., Marceline
Howell, B. D., Brookfield
Kimberlin, Herbert C., Trenton
LaSalle, Michael W., 1601 E. 47th Tr., Kansas City
Lucas, John H., Brookfield
McArtor, Thomas R., Browning
Magill, Joseph S., Milan
Mairs, Edgar J., Trenton
Mandler, George, Chillicothe
Nibbe, Albert F., Bethany
Nixon, Edward E., Gallatin
Perry, John M., Princeton
Platz, John H., Carrollton
Smith, Robert W., Marceline
Staton, R. Hamilton, Carrollton
Sutherland, Gladys P., Bethany
Sweiger, James H., Maysville
Thompson, Emma A. B., Dumas Apts., Columbia
Titmarsh, J. B., Jr., Bethany
Vandiver, Virgil D., Chillicothe
Vinyard, Jack L., Carrollton
Wilson, Fred K., Winston
Zahrt, Frank H., Princeton

GREENE COUNTY MEDICAL SOCIETY
(Springfield)

Allen, Jerry H., 1211 S. Glenstone St.
Amos, James R., 1745 S. National St.
Anthony, Dallas, Professional Bldg.
Ash, Charles J., 2300 S. Maryland St.
Ashley, Thomas E., 1211 S. Glenstone St.
Atkinson, Thomas E., Jr., 609 E. Cherry St.
Auner, Cecil R., 600 S. Glenstone St.
Baldwin, Richard, 600 S. Glenstone St.
Barber, John J., Corrigan, Texas
Bellomy, Bruce B., Professional Bldg.
Bonebrake, M. D., Professional Bldg.
Box, Ernest M., 412 E. Commercial St.
Brown, Alex L., 1636 S. Glenstone St.
Brown, James T., 1653 S. National St.
Brown, Lyman D., 311½ College St.
Burkey, Jordan W., Professional Bldg.
Busiek, Paul J., Professional Bldg.
Busiek, Urban J., Professional Bldg.
Callaway, Guy D., 1155 S. Delaware St.
Callaway, Guy D., Jr., 1211 S. Glenstone St.
Christy, Raymond A., Jr., 1211 S. Glenstone St.
Clarke, Michael J., 1636 S. Glenstone St.
Clary, William F., 1636 S. Glenstone St.
Clawson, James W., Professional Bldg.
Clayton, Edgar L., Professional Bldg.
Cochran, Thomas E., Jr., 2423 Brentwood Blvd.
Coller, Frederick B., 2433 Marlan St.
Conrad, Raymond C., 609 Cherry St.
Crawford, Oral B., Professional Bldg.
Cunningham, Darral D., 1715 Boonville St.
Delzell, William A., McDaniel Bldg.
Dietz, M. Wendell, Burge Protestant Hospital
Dillard, Erin M., Professional Bldg.
Dills, Joseph N., 1715 Boonville Ave.
Dimond, Edgar A., Veterans Adm. Hospital, McKinney, Tex.
Duncan, Robert D., 1534 E. Sunshine Blvd.
Elkins, Ronald F., Professional Bldg.
Ellis, Francis J., Professional Bldg.
Evans, Ezra L., Jr., Professional Bldg.
Farthing, Fred R., 1234 E. Walnut St.
Farthing, Gene W., 1636 S. Glenstone St.
Feller, C. E., 1523 N. Jefferson Ave.
Ferguson, John P., Jr., 1219 S. Clay St.
Ferrell, Thomas E., Jr., 1534 E. Sunshine Blvd.
Fessenden, Ersel M., 634 Kingsbury St.
Fitch, C. H. Max, 1711 Boonville Ave.
Focht, Ralph H., Strafford
Francis, William C., 600 S. Glenstone St.
Freeman, Hal E., 609 Cherry St.
Gentry, Merritt L., 1933 Saratoga St.
German, Walter A., Jr., 1211 S. Glenstone St.
Glenn, Elmer E., Forsyth
Glynn, Robert R., 1211 S. Glenstone St.
Gorelick, David F., Professional Bldg.
Gose, Don F., 1550 E. Sunshine Blvd.
Hahn, Andrew L., Professional Bldg.
Hall, David W., 2122 Wayland Dr.
Hall, Durward G., Route 12, Box 980
Hanan, Ernest B., 724 E. Kingsbury St.
Hanss, Armand W., 600 S. Glenstone St.
H'Doubler, Francis T., Professional Bldg.
H'Doubler, Francis T., Jr., Professional Bldg.
Hogeboom, George W., 3026 E. Glenwood St.
Hollis, Richard W., Professional Bldg.
Holmes, David R., 1636 S. Glenstone St.
Hoover, H. Lee, Jr., 1330 E. Walnut St.
Horst, Otto C., Medical Arts Bldg.
Horton, James D., Professional Bldg.
Ivy, Henry B., 600 S. Glenstone St.
Jameson, James E., Professional Bldg.
Johnson, George L., Tripler Army Hospital, Box 71, APO 438, San Francisco, Calif.
Johnson, Warford B., Professional Bldg.
Johnson, William F., Professional Bldg.
Johnston, Joseph L., 1855 S. Jefferson St.
Key, James S., Professional Bldg.
Klingner, George M., 2003 E. Sunshine Blvd.
Knabb, Arthur D., 1630 N. Jefferson St.
Knabb, Harris, 1630 N. Jefferson St.
Knabb, Henry F., 5879 S.W. 60th St., Coral Gables 34, Fla.
Knabb, Herny F., Jr., 1630 N. Jefferson St.
Knabb, Kenneth E., 1630 N. Jefferson St.
Kolze, Vernon W., 600 S. Glenstone St.
Langston, Walter R., Professional Bldg.
Leidinger, Karl J., Republic
Lemmon, George B., 1101 E. Walnut St.
Lemmon, G. Bruce, Jr., Professional Bldg.
Leslie, James F., 1715 Boonville Ave.

Litton, Lyle D., Burge Hospital
Lockhart, Charles E., Professional Bldg.
Lorenc, Ernest, Professional Bldg.
Lowe, Horace A. Medical Arts Bldg.
Lowe, Horace A., Jr., Medical Arts Bldg.
Lurie, Harold H., 600 S. Glenstone St.
McAlhany, Howard J., 609 Cherry St.
Maddux, William P., Professional Bldg.
Maher, Robert W., Professional Bldg.
Maple, Francis M., 1211 S. Glenstone St.
Marshall, W. J., Professional Bldg.
Meyer, Claude B., Nixa
Morton, Paul C., 1508 E. Stanford St.
Moseley, F. Thomas, 2102 S. Dollison St.
Musick, James D., Medical Arts Bldg.
Napper, Marvin L., Professional Bldg.
Neu, Leo T., Jr., 1818 Thelma St.
Overend, Don S., 1211 S. Glenstone St.
Palcheff, Chris L., 600 S. Glenstone St.
Park, William I., Jr., Professional Bldg.
Penninger, William H., 600 S. Glenstone St.
Peterson, Stanley S., 1211 S. Glenstone St.
Plumlee, William C., 600 S. Glenstone St.
Polk, John W., 609 Cherry St.
Powell, Edwin M., Professional Bldg.
Prater, Bill G., Professional Bldg.
Pruett, Paul L., Professional Bldg.
Purcell, Elmer M., Professional Bldg.
Rainwater, E. H., Professional Bldg.
Rigney, Levi M., Woodruff Bldg.
Rosen, Max, Professional Bldg.
Russell, Earl D., 1503 S. Glenstone St.
Scanlon, Robert C., 1711 Boonville St.
Schwartz, Eugene J., Professional Bldg.
Schweitzer, Fred C., Jr., Woodruff Bldg.
Sewell, Walter S., Professional Bldg.
Siceluff, Joseph G., 609 Cherry St.
Silsby, Don H., Landers Bldg.
Silsby, Don J., Professional Bldg.
Silsby, Harry D., Professional Bldg.
Simpson, Albert P., Springfield Medical Bldg.
Simpson, Emerson L., 1630 N. Jefferson St.
Smith, C. Souter, 620 St. Louis St.
Smith, Harvey S., Burge Hospital
Snead, William H., Jr., Professional Bldg.
Stewart, Robert B., 600 S. Glenstone St.
Stewart, R. Wendell, Professional Bldg.
Sundstrom, Frank D., 1211 S. Glenstone St.
Tarrasch, E. L., 1636 S. Glenstone St.
Taylor, William E., Southwest Missouri State College
Thomasson, David D., 1630 N. Jefferson St.
Tillman, Walter W., Jr., Professional Bldg.
Tsang, John L. K., 1636 S. Glenstone St.
Turner, Glenn O., Professional Bldg.
Upshaw, Paul O., Medical Arts Bldg.
Vail, A. Denton, Professional Bldg.
Wakefield, Elmer G., 1534 E. Sunshine St.
Wakeman, Jasper N., 600 S. Glenstone St.
Walker, William M., Professional Bldg.
Walsh, William T., 421 Beverly Ave., Morgantown, W. Va.
Webb, Leslie R., Jr., Professional Bldg.
White, R. Ned., Professional Bldg.
Williams, John W., 600 S. Glenstone St.
Williams, John W., Jr., Landers Bldg.
Winegar, Alvon C., 515 E. High St., Jefferson City
Wise, Gordon F., Professional Bldg.
Wittmer, S. C., 600 S. Glenstone St.
Wood, William W., 1211 S. Glenstone St.
Wooldridge, W. E., Professional Bldg.
Yancy, Daniel L., 1211 S. Glenstone St.

GRUNDY COUNTY

(Grand River Medical Society)

HARRISON COUNTY

(Grand River Medical Society)

HENRY COUNTY MEDICAL SOCIETY

Bradshaw, W. D., Clinton
Hollingsworth, Ray S., Clinton
Hughes, Shelby B., Clinton
King, Richard H., Clinton
McFadden, Gene A., Clinton
Simmons, Charles R., Windsor
Smith, James O., Clinton
Smith, William J., Windsor
Thurber, Claude M., Windsor
Walker, George S., Clinton
Walker, Hugh B., Clinton
Woltzen, Simon W., Clinton

HICKORY COUNTY

(Dallas-Hickory-Polk County Medical Society)

HOLT COUNTY

(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

HOWARD COUNTY MEDICAL SOCIETY

Bloom, W. A., Fayette
Dean, Francis D., Fayette
Gardner, Joseph W., Glasgow
Leech, Maurice P., Fayette
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette

HOWELL COUNTY

(South Central Counties Medical Society)

IRON COUNTY

(Mineral Area County Medical Society)

JACKSON COUNTY MEDICAL SOCIETY

(Kansas City)

Aaron, George A., 10901 Winner Rd., Independence
Adelman, Arthur, 751 E. 63rd St. 10
Agee, Loren G., 5801 Kingslee Dr. 34
Ahlefeld, Charles B., 215 Pershing Rd. 41
Aisenstadt, E. Albert, 1204 W. 67th St. 13
Alberts, Phillip S., 1725 N.E. 66th Ave., Portland, Ore.
Allebach, H. K., Research Hospital 8
Allen, Charles H., 616 W. Maple St., Independence
Allen, Robert E., 411 Nichols Rd. 12
Allen, William B., 4620 Nichols Parkway 12
Alsop, Webb S., Jr., 411 Nichols Rd. 12
Altomare, Edward P., 2610 East 63rd St. 30
Altringer, Arthur N., 305 W. 43rd St. 11
Altringer, Mary P., 8706 B. Blue Ridge 38
Anderson, A. Isadore, 723 W. 45th St. 11
Anderson, Raymond B., Plaza Time Bldg. 12
Anderson, Richard W., 1001 Romany Rd. 13
Andrews, Berneil W., 4620 Nichols Parkway 12
Andrus, Bailey C., Plaza Medical Bldg. 12
Appleford, G. Burton, 5303 W. 79th Tr., Prairie Village, Kan.
Arms, Arnold V., 4635 Wyandotte St. 12
Arst, Herbert E., 137 Austin, Schelling Manor, Salina, Kan.
Aschman, Theodore H., Plaza Time Bldg. 12
Asher, A. Graham, Professional Bldg. 6
Atcheson, Bellefield, 6524 Overhill Rd., Shawnee Mission, Kan.
Atwell, Floyd C., 4620 Nichols Parkway 12
Aull, John, 6544 Summit St. 13
Bachmann, Paul L., 1212 W. Truman St., Independence
Baer, Alvin J., 751 E. 63rd St. 10
Baker, Philip J., 9306 East New 40 Highway, Independence
Ball, James E., 4917 College St. 30
Ballard, V. Bryce, Plaza Time Bldg. 12
Bare, Chester I., Jr., 9406 E. 63rd St., Raytown
Barelli, Pat A., 425 E. 63rd St. 10
Barnard, John L., Jr., 4312 Nichols Parkway 11
Barnes, Robert H., 2200 McCoy St. 8
Barnett, Gordon P., 751 E. 63rd St. 10
Barry, Gerald W., 3601a Troost Ave. 9
Barry, John W., General Hospital 1
Barry, William B., 116 W. 47th St. 12
Baum, Frank E., 701 E. 63rd St. 10
Baumhardt, Edward E., 4635 Wyandotte St. 12
Bay, Merrill R., 1808 W. Main St., Blue Springs
Becker, Richard R., 4000 Baltimore St. 11
Bee, James E., 3520 Broadway 41
Bell, William F., 18 E. 3rd St., Lee's Summit
Belot, Monti L., 7411 Highway 71, N.W., Parkville
Bennett, James D., 409 E. 63rd St. 10
Benoit, Hector W., Jr., Plaza Parkway Bldg. 12
Berenson, Sheldon E., 4620 Nichols Parkway 12
Bergmann, Victor H., 105 Ward Parkway 12
Bernreiter, Michael, Professional Bldg. 6
Berry, Guy N., 4706 Broadway 12
Berry, Maxwell G., 5020 Summit St. 2
Biggs, Harry L., 63rd & Evanston St., Raytown 33
Bikales, Victor W., 425 East 63rd St. 10
Bills, Marvin L., Plaza Time Bldg. 12
Black, Don A., Professional Bldg. 6
Black, Eugene C., Professional Bldg. 6
Blim, Richard D., Plaza Time Bldg. 12
Bolin, N. Venay, Plaza Parkway Bldg. 12
Boody, Robert J., Plaza Time Bldg. 12
Border, Charles T., 1701 Ruby Dr., Garland, Tex.
Bordy, Marvin D., 701 East 63rd St. 10
Borenstine, Joseph, 751 E. 63rd St. 10
Boughnou, Harvey P., 315 Alameda Rd. 2
Bourke, Timothy S., Rialto Bldg. 6
Boutros, Amin, 3112 Linwood Blvd. 28
Bowser, John F., Plaza Time Bldg. 12
Boyd, George K., 5111 Independence Ave. 6
Bradford, John F., Professional Bldg. 6
Brams, Jack B., 751 E. 63rd. St. 10
Braverman, Abe E., 701 E. 63rd St. 10
Brewster, Charlotte M., 2200 McCoy St. 8
Bridgens, James G., Independence Sanitarium, Independence
Brown, Adrian J., 4526 Paseo Blvd. 10
Brown, Irwin S., Plaza Time Bldg. 12
Brown, Robert S., 4706 Broadway 12
Broyles, Glen H., Professional Bldg. 6
Brumm, Lawrence W., 6308 Troost Ave. 31
Bruner, Robert E., 912 Valentine Rd.
Brust, Carl H., 6114 Howe Dr., Mission, Kan.
Bryan, William H., Jr., 2122 E. 12th St. 27
Buckingham, William, Professional Bldg. 6
Buckner, Robert C., Plaza Parkway Bldg. 12
Budke, Harold A., 306 E. 12th St. 6
Buhler, Victor B., 330 W. 47th St. 12
Buie, Bruce R., 5801 Kingslee Dr. 34
Bunting, Williston P., 305 W. 43rd St. 11
Burns, Beryl I., 29 South State St., Salt Lake City, Utah
Burns, Robert R., 3545 Wedgway Dr., Fort Worth, Tex.
Butcher, Robert W., 7924 Paseo Blvd. 32
Butterworth, Nelson S., 231 W. 47th St. 12
Byers, Philip L., 4635 Wyandotte St. 12
Caffrey, Raymond J., 713 Main St., Grandview
Caldwell, John K., Argyle Bldg. 6
Callaway, Luther M., 306 E. 12th St. 6
Calovich, Emery R., 4620 Nichols Parkway 12
Campbell, Frederick B., Professional Bldg. 6
Campbell, John G., 827 W. 60th Tr. 13
Carbaugh, Glenn C., Bryant Bldg. 6
Carlson, Hjalmar E., Professional Bldg. 6
Carmichael, Francis A., Jr., Plaza Time Bldg. 12
Carrier, Edson C., Plaza Medical Bldg. 12
Caruso, Anthony A., 924 Linwood Blvd. 9
Casady, Gilbert N., 9830 Aberdeen Dr., Prairie Village, Kan.
Casebolt, Buford T., 4000 Baltimore St. 11
Casebolt, Milton B., 4000 Baltimore St. 11
Casford, Ralph S., 315 Nichols Rd. 12
Castelaw, Rush E., 3731 Locust St. 9
Cavaness, Ernest W., 1010 Neptune Dr., Leucadia, Calif.
Centner, Paul J., 2727 Main St. 8
Chambers, James Q., Jr., 4620 Nichols Parkway 12
Chandler, Robert A., Doctors Bldg. 10
Chapman, Arthur H., Professional Bldg. 6
Chapman, Samuel B., Argyle Bldg. 6
Cheng, Alfred K., JUSMAG, APO 146, Box 43, San Francisco, Calif.
Clark, Harold B., 2800 Dell Ave., Venice, Calif.
Clark, Irving H., 5801 Kingslee Dr. 34
Clasen, Arthur C., 9102 West Bay Harbor Dr., Miami Beach 54, Fla.
Cline, Merle A., 4126 St. John Ave. 23
Coburn, Donald F., Plaza Time Bldg. 12
Cochrane, Joseph J., 4706 Broadway 12
Cockerell, Sanford F., 11200 Winner Rd., Independence
Coffey, Ralph R., Professional Bldg. 6
Coffin, Theodore A., Professional Bldg. 6
Cohen, Harry K., 751 E. 63rd St. 10
Cohen, Hilliard, Menorah Hospital 10
Colglazier, Mary C., 3317 E. 43rd St. 30
Colom, George A., Plaza Theatre Bldg. 12
Connell, Evan S., Commerce Bldg. 6
Conover, Charles C., 5930 Oakwood Rd., Shawnee Mission, Kan.
Cooper, Charles S., Professional Bldg. 6
Cooper, John H., Argyle Bldg. 6

Cooper, Leo F., 8401 Roe Blvd., Shawnee Mission, Kan.
Cortner, Mary C., 4526 Paseo Blvd. 10
Counsell, Chester M., 708 W. 17th St. 8
Cowherd, Joseph B., 7721 State Line 14
Cox, Kenneth E., 4635 Wyandotte St. 12
Cramer, Quentin, Professional Bldg. 6
Creditor, Morton C., Menorah Hospital 10
Crocker, Albert M., 2202a E. 31st St. 9
Culbertson, William F., 1253 Huntington Rd. 13
Curran, Desmond, Federal Reserve Bank Bldg. 6
Curran, Edward J., Federal Reserve Bank Bldg. 6
Curran, Kevin E., Federal Reserve Bank Bldg. 6
Curts, Calvin J., Professional Bldg. 6
Cutcliff, Daniel J., 415 E. 66th St.
Dann, David S., 701 E. 63rd St. 10
Davis, Herbert V., 4620 Nichols Parkway 12
Davis, Jack M., Raytown
Davis, John J., 9011 Delmar Blvd., Overland Park, Kan.
Davis, Kenneth A., 231 W. 47th St. 2
Davis, Robert C., Professional Bldg. 6
Day, Cameron B., St. Luke's Hospital 11
Decker, Albert I., 3000 West 73rd St., Shawnee Mission, Kan.
DeMaria, Peter F., 8125 East Gregory Blvd. 33
DeMott, John D., Professional Bldg. 6
DeMotte, John A., Plaza Medical Bldg. 12
Dennis, Charles C., Professional Bldg. 6
Deweese, Everett R., Rialto Bldg. 6
Dickson, Frank D., 4312 Nichols Parkway 11
Diveley, Rex L., 4312 Nichols Parkway 11
Dixon, Otto J., Professional Bldg. 6
Dixon, Vewiser L., 2204½ E. 18th St. 27
Dlabal, Luke J., 1210 Ash Ave., Independence
Doane, William L., Grandview
Dodge, Mark, 4635 Wyandotte St. 12
Dodge, Milton, 701 E. 63rd St. 10
Doherty, William R., 2108 W. 75th St., Shawnee Mission, Kan.
Dolezal, Joseph B., Bryant Bldg. 6
Dorsch, Ervin H., 10901 Winner Rd., Independence
Downey, James W., 425 E. 63rd St. 10
Drake, Roy F., Professional Bldg. 6
Draney, Thomas E., 4526 Paseo Blvd. 10
Drisko, Robert M., 2100 Stratford Rd., Shawnee Mission, Kan.
Drowns, Bruce V., Professional Bldg. 6
Duer, Mildred C., 310 W. 47th St. 12
Duncan, Ralph E., P.O. Box 2597, 42
Duncan, William H., Professional Bldg. 6
Dunleavy, James D., Wirthman Bldg. 9
Durnell, Monaford D., 18 E. Third St., Lee's Summit
Dwyer, Frank X., 4620 Nichols Parkway 12
Dwyer, Hugh L., 5408 Central Ave. 12
Edde, Clifford G., Argyle Bldg. 6
Edmonds, Devilla D., 4800 E. 24th St. 27
Eisemann, Gustave, 751 E. 63rd St. 10
Eldridge, Charles J., 409 East 63rd St. 10
Elias, David J., 9306 E. New 40 Highway, Independence
Elliott, James R., 1080 Busch Garden Ct., Pasadena, Calif.
Elliott, Raymond G., Bryant Bldg. 6
Elliott, Wade E., 710 W. 12th St. 5
Ellis, Elmer F., 600 E. 22nd St. 8
Elser, Otto H., 10901 Winner Rd., Independence
Engel, Lawrence P., Plaza Medical Bldg. 12
Enna, Carl D., Argyle Bldg. 6
Eshelman, Albert D., 9306 East New 40 Highway, Independence
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, William R., Bryant Bldg. 6
Eubank, William Y., Professional Bldg. 6
Farley, Claude C., 4526 Paseo Blvd. 10
Farney, Jacob P., 751 E. 63rd St. 10
Farnsworth, Jesse J., Professional Bldg. 6
Feierabend, Frank L., Argyle Bldg. 6
Feist, George V., 2400 Tomahawk Rd. 5
Ferguson, Donald S., 2012 E. 24th St. 27
Ferguson, James T., Bryant Bldg. 6
Ferris, Carl R., Argyle Bldg. 6
Finkle, Robert H., 9507 E. 80th Tr., Raytown
Fitzgerald, Robert H., 10901 Winner Rd., Independence
Flanders, Horace F., Professional Bldg. 6
Flanders, Virgil E., Professional Bldg. 6
Flatley, John A., 63rd & Raytown Rd., Raytown
Fleming, Royall B., 1433 E. 19th St. 8
Florian, Albert J., 1224 West 69th Tr. 13
Folck, William P., Professional Bldg. 6
Forman, Louis H., 4635 Wyandotte St. 12
Forsythe, Robert W., Plaza Time Bldg. 12
Fowler, Fred D., 4706 Broadway 12
Fowler, James W., 1103 Grand Ave. 6
Franklin, Curtis U., 2701 East 31st St. 28
Fredeen, Robert C., Plaza Time Bldg. 12
Frick, John P., Professional Bldg. 6
Friedman, Morris L., 701 E. 63rd St. 10
Fritzlen, Thomas J., 7515 Terrace 14
Fuhrman, Donald L., 4706 Broadway 12
Fulton, Albert E., 2625 West Paseo Blvd. 8
Gainey, Harold L., 4635 Wyandotte St. 12
Ganley, William C., Argyle Bldg. 6
Gard, Raymond F., 10901 Winner Rd., Independence
Garrison, Roy F., 6509 Prospect St. 32
Gaskins, John H., Plaza Parkway Bldg. 12
Geha, Braham J., Doctors Bldg. East 10
Gelperin, Abraham, 2625 W. Paseo Blvd. 8
Gempel, Paul A., 315 Nichols Rd. 12
Gentry, Enoch N., Jr., Telephone Bldg. 6
Gestring, Hugh A., 1220 E. 31st St. 9
Getelson, Joseph, Rialto Bldg. 6
Gibson, David M., St. Luke's Hospital 11
Gilkey, Harry M., Professional Bldg. 6
Gilliland, Oliver S., 420 E. 70th St. 31
Gillmor, Charles S., 420 E. Armour St. 9
Ginsberg, Norman A., 751 E. 63rd St. 10
Gist, William W., 330 W. 47th St. 12
Glasscock, Ernest L., Plaza Time Bldg. 12
Goldman, Stanley L., 751 E. 63rd St. 10
Goldsich, Edward, Plaza Theatre Bldg. 12
Goodman, Leroy, 751 E. 63rd St. 10
Goodson, William H., Jr., Professional Bldg. 6
Goolsbee, Robert L., 4625 W. 61st Tr., Mission, Kan.
Gorrell, Ned B., Grandview
Gottsch, Joseph C., Professional Bldg. 6
Grabske, Charles F., 10901 Winner Rd., Independence
Grabske, Charles F., Jr., 10901 Winner Rd., Independence
Graham, James W., Argyle Bldg. 6
Graham, Wallace H., Argyle Bldg. 6
Grauerholz, James W., 3527 Broadway 11
Greaves, Eli A., 7303 Madison Ave. 14
Green, John R., 10901 Winner Rd., Independence
Green, Stanley L., 10901 Winner Rd., Independence
Greene, W. Wallace, 4620 Nichols Parkway 12
Gregory, Ralph W., 4620 Nichols Parkway 12
Griffith, John A., Jr., Plaza Medical Bldg. 12
Growdon, John A., Professional Bldg. 6
Guffey, Don C., Professional Bldg. 6
Gullett, Charles C., 10 Richards Rd. 5
Gundle, Sigmund, 425 E. 63rd St. 10
Gunn, Richard W., 317 N. Van Brunt St. 6
Haggan, Margaret E., 6228 Agnes St.
Haight, John M., 3401 E. 12th St. 27
Haith, Walter F., 2701 E. 31st St. 28
Haley, Jack A., 117 La Canada, Goodyear, Ariz.
Hall, Thomas B., Professional Bldg. 6
Halperin, Phillip H., 751 E. 63rd St. 10
Hamel, Herbert A., 6306 Morningside Dr. 13
Hamill, Robert W., 4620 Nichols Parkway 12
Hanes, Robert L., 4706 Broadway 12
Handley, James M., 5635 Russell St., Mission, Kan.
Hanes, Lee D., 446 W. 69th St. 13
Hardacre, Ruth A., 3300 Charlotte St. 9
Harless, Morris S., 409 E. 63rd St. 10
Harned, Bert W., 2826 Main St. 8
Hart, Lawrence W., 321 Ward Parkway 12
Hartwig, Frederick H., 701 E. 63rd St. 10
Hash, Emalyn H., 807 W. 69th Tr. 13
Hashinger, Edward H., 7884 Lookout Dr., LaJolla, Calif.
Hausheer, Herman J., 1804 S. Dodgion St., Independence
Haynes, Lee, 820 Archibald St. 11
Haynes, Solon E., 2727 Main St. 8
Hazen, Robert M., Argyle Bldg. 6
Heller, B. Marcus, 409 E. 63rd St. 10
Hellerstein, Stanley, 751 E. 63rd St. 10
Helman, Richard G., 7721 State Line 14
Henry, Clarke L., Plaza Parkway Bldg. 12
Henry, Schubert D., 1115 Grand Ave. 6
Herrman, George V., Plaza Time Bldg. 12
Hess, Paul D., 7501 Mission Rd., Shawnee Mission, Kan.
Hibbard, Blaine Z., Plaza Time Bldg. 12
Hickerson, William H., 604 W. Maple St., Independence
Higgins, Robert S., 411 Nichols Rd. 12
Hill, Jack H., Trinity Lutheran Hospital 8
Hill, Jesse N., 1438 Hedges Ave., Independence
Hines, Paul, 2625 W. Paseo Blvd. 8
Hink, Frederick W., 10229 Independence Rd., Independence
Hirsch, Joe E., 4706 Broadway 10
Hodgson, Frank H., 4301 Main St. 11
Hoeper, Samuel D., 6232 Troost Ave. 10
Hoffman, Jacob S., 751 E. 63rd St. 10
Hoffmann, R. Lee, Professional Bldg. 6
Hogan, Daniel F., Route 100, Laguna Hts., Port Isabel, Tex.
Hogue, Frank S., Plaza Medical Bldg. 12
Holder, Thomas M., Mercy Hospital 6
Hollweg, Kenneth C., Bryant Bldg. 6
Holman, Melvin V., Plaza Parkway Bldg. 12
Holt, Waldo S., 4620 Nichols Parkway 12
Holton, Edward B., 10901 Winner Rd., Independence
Hook, Waller C., Professional Bldg. 6
Hooper, Robert N., Plaza Broadway Bldg. 12
Hughes, Gerald E., 6509 Prospect St. 32
Hungate, Carroll P., Argyle Bldg. 6
Hunt, Claude J., Professional Bldg. 6
Hunter, Martin P., Waldheim Bldg. 6
Hurwitt, Frank, Park East Hotel 6
Hyde, Lawrence L., Plaza Parkway Bldg. 12
Ingham, Walton C., 411 Nichols Rd. 12
Irland, Robert D., Union Station Hospital 8
Irwig, Fred, Professional Bldg. 6
Jackson, William R., Bryant Bldg. 6
Jacob, Walter P., 701 E. 63rd St. 10
Jacobs, Morton, 6416 Verona Rd., Shawnee Mission, Kan.
Jacobs, Walter H., 751 E. 63rd St. 10
Jaime, Nicholas, 715 Westport Rd. 11
James, Otis E., Jr., 6306 Morningside Dr. 13
Jansen, Robert, 101 E. 63rd St. 13
Jarvis, James A., 4620 Nichols Parkway 12
Jeffries, Robert C., 6315 Brookside Plaza 13
Jennett, Harry N., 2701 Forest Ave. 9
Jennett, J. Harvey, Professional Bldg. 6
Johns, Leo E., General Hospital 8
Johnson, C. Laurence, Professional Bldg. 6
Johnson, James S., 2202 E. 18th St. 27
Johnson, Joseph E., 112 & 71 Highway, Hickman Mills
Johnson, Thomas M., 310 W. 47th St. 12
Johnson, William A., 2200 Prospect Ave. 27
Johnstone, Paul N., Bryant Bldg. 6
Jonas, Harry S., Jr., 11711 Markham Rd., Independence
Jones, George H., 1435 E. 78th St. 31
Jones, T. Reid, 411 Nichols Rd. 12
Justus, John B., Plaza Parkway Bldg. 12
Kantor, Julius M., 701 E. 63rd St. 10
Kantor, Samuel, 751 E. 63rd St. 10
Kartus, Irving, 6155 Oak St. 13
Katz, Milton, 4620 Nichols Parkway 12
Kaul, Philip G., Plaza Time Bldg. 12
Keairnes, Harold W., 10901 Winner Rd., Independence
Kealhofer, George C., 6627 Prospect Ave. 32
Keeler, James E., 4620 Nichols Parkway 12
Kelly, Eugene H., 402 Wabash Ave. 24
Keltner, Raymond O., 9406 E. 63rd St., Raytown
Kendall, Charles A., 10901 Winner Rd., Independence
Kennard, George K., 4635 Wyandotte St. 12
Kent, Bela K., 701 E. 63rd St. 10
Kent, Clifford F., Professional Bldg. 6
Kerr, Russell W., St. Joseph Hospital 28
Ketcham, William M., Waldheim Bldg. 6
Ketron, Marvin B., 5933 Cherry St. 4
Ketterman, Grace H., 112th & 71 Highway, Hickman Mills
Ketterman, Herbert L., 9231 Belinder St. 15
Kettner, Edward G., Professional Bldg. 6
Kienberger, Paul A., 5246 St. John St. 23
Kiene, Richard H., 4312 Nichols Parkway 11
Kimball, Merritt H., 610 East 36th St. 9
King, J. Tenbrook, 4400 Nichols Parkway 11
King, Walter R., Professional Bldg. 6
Kingsbury, Helen C., 6415 Sagamore Rd., Shawnee Mission, Kan.
Kiser, David M., 920 W. 47th St. 12
Kitchen, William M., 425 E. 63rd St. 10
Klein, Edward H., Plaza Medical Bldg. 12
Klepinger, Dayton P., Neosho

Knight, John S., 305 W. 43rd St. 11
Knight, Lyle B., 18 E. 3rd St., Lee's Summit
Knoch, H. Kermit, Plaza Parkway Bldg. 12
Koehler, Charles A., Argyle Bldg. 6
Kohn, Cecil M., 751 E. 63rd St. 10
Korth, William M., Professional Bldg. 6
Kraft, Jacob, 701 E. 63rd St. 10
Kranson, Seymour J., 11200 Winner Rd., Independence
Kuhn, William F., II, 6247 Brookside St. 13
Kyger, Fred B., Professional Bldg. 6
Kyger, John E., 701 E. 63rd St. 10
Kyner, Thomas A., Wirthman Bldg. 9
Lacy, N. Eugene, Plaza Time Bldg. 12
Laffoon, France L., 869 Alta Vista Dr., Vista, Calif.
Lally, James J., Rialto Bldg. 6
Lamar, Robert F., Professional Bldg. 6
Lambert, L. Marian, 5302 Paseo Blvd. 10
Landis, George K., Professional Bldg. 6
Laning, J. Halcombe, 6205 Brookside Blvd. 13
Lapi, Angelo, St. Mary's Hospital 8
Lapi, Ruth M., 2012 Stratford Rd., Shawnee Mission, Kan.
Lapp, Harry C., 751 E. 63rd St. 10
Latham, Raymond W., 4620 Nichols Parkway 12
Laurenzana, Frank P., 428 S. White St. 23
Layton, Ira C., Argyle Bldg. 6
Lee, George C., 601 E. Meyer Blvd. 31
Lehner, Richard L., Professional Bldg. 6
Leifer, William W., 701 E. 63rd St. 10
Leitch, Cecil G., 808 S. 15th St., Blue Springs
Leitz, Frank B., 6832 Locust St. 10
Lentz, Clark H., 215 W. Pershing Rd. 41
Leo, William A., Professional Bldg. 6
Levey, Harry B., 701 E. 63rd St. 10
Lewis, Revis C., Professional Bldg. 6
Lichtor, Alexander, 751 E. 63rd St. 10
Lichtor, Joseph M., 751 E. 63rd St. 10
Lieberman, B. Albert, Jr., Professional Bldg. 6
Lilly, Terry E., Sr., 306 E. 12th St. 6
Lilly, Terry E., Jr., 306 E. 12th St. 6
Lindquist, Carl N., P. O. Box 679
Link, Vance E., 1201 W. 36th St., Independence
Linville, Howard E., Professional Bldg. 6
Loewy, Louise B., 2625 Paseo Blvd. 8
Lohrentz, Lois H., 1710 Independence Ave. 6
Long, R. Stacy, 4800 E. 24th St. 27
Love, Robert W., Jr., 6714 Tommie La., Millington, Tenn.
Lowell, Paul, 712 W. 46th St. 12
Lowrey, Ford J., Rialto Bldg. 6
Lundgren, Fred H., Jr., Plaza Medical Bldg. 12
Luppens, Albert F., Box 265, Lee's Summit
Lyddon, Harold F., Jr., 75th & Troost Ave. 31
Lyle, Ray M., 5725 Park Ave. 30
Lytton, George J., Plaza Theatre Bldg. 12
McAlester, Andrew W., III, 33 E. Elizabeth St., Brownsville, Tex.
McCalla, John P., 6312 Raytown Rd., Raytown
McCanse, Raymond A., 4706 Broadway 12
McCarthy, William F., 140a Lake Topawingo, Blue Springs
McClanahan, Robert C., Professional Bldg. 6
McConchie, James E., 10901 Winner Rd., Independence
McCoy, Frederick J., 701 E. 63rd St. 10
McCubbin, Clarence R., 701 E. 63rd St. 10
McCullough, Campbell C., Argyle Bldg. 6
McCunniff, William B., Argyle Bldg. 6
McDonald, Bruce P., 2604 Prospect Ave. 27
McDonald, Victor G., Jr., Plaza Time Bldg. 12
McDonnell, John F., 5411 Central Ave. 12
McFarland, M. Donald, Plaza Medical Bldg. 12
McGannon, Paul T., 920 W. 47th St. 12
McGuire, Thomas H., Plaza Parkway Bldg. 12
McHale, Thomas C., 4601 Independence Ave. 24
McIntyre, John D., 4620 Nichols Parkway 12
McKee, Joseph W., Professional Bldg. 6
McKee, Wallace P., Plaza Medical Bldg. 12
McLeod, John, 116 W. 47th St. 12
McMillan, Thomas E., Professional Bldg. 6
McPhee, William R., 1205 W. 76th St. 14
McPherson, Owen P., 12901 Grandview Rd.
McVay, James R., V.F.W. Bldg. 11
McVay, James R., Jr., V.F.W. Bldg. 11
MacInnis, Florence E., 4620 Nichols Parkway 12
Maclean, John A., 1301 Chavez Ravine Rd., Los Angeles, Calif.
MacNaughton, Ralph E., St. Joseph's Hospital 28
MacNaughton, Robert A., 3208 West 101st St. 37
Major, Hermon S., 3100 Euclid Ave. 9
Mangels, Kenneth A., 1212 W. Truman Rd., Independence
Marks, Mark M., 701 E. 63rd St. 10
Marsh, Alice, Pleasant Hill
Marshall, Cameron F., Plaza Theatre Bldg. 12
Masucci, Joseph M., Argyle Bldg. 6
Mathewson, Hugh S., 4620 Nichols Parkway 12
May, James W., 425 E. 63rd St. 10
Mayer, John H., Jr., Plaza Parkway Bldg. 12
Melgaard, S. Ross, 6831 Cherry St.
Meriwether, Don R., 5109 W. 60th Tr., Mission, Kan.
Meyer, Paul W., 4312 Nichols Parkway 12
Meyers, Harold L., 751 E. 63rd St. 10
Miles, George O., Plaza Broadway Bldg. 12
Miller, Clint L., 18 E. 3rd St., Lee's Summit
Miller, Gerald L., 4706 Broadway 12
Miller, Max I., 2826 Main St. 8
Miller, Walter P., 6328 Baltimore St. 13
Miller, Wilson H., 3632 Independence Ave. 24
Mitchell, Andrew D., Plaza Time Bldg. 12
Mitchell, Robert H., Bryant Bldg. 6
Mixson, William C., 4635 Wyandotte St. 12
Monahan, Elmer P., 17500 West 95th St., Lenexa, Kan.
Montello, Samuel A., 4620 Nichols Parkway
Montgomery, James G., Professional Bldg. 6
Mooney, Justin L., Bryant Bldg. 6
Mooney, Marcel L., 751 E. 63rd St. 10
Moore, Robert A., 106 W. 14th St. 5
Morest, F. Stanley, Plaza Parkway Bldg. 12
Morgan, David B., 4620 Nichols Parkway 12
Moriarty, Lauren R., St. Mary's Hospital 8
Morris, William R., 9406 E. 63rd St., Raytown
Moss, Paul, 4706 Broadway 12
Mosser, Robert S., 3114 Norton St., Independence
Mueller, Martin J., Argyle Bldg. 6
Mullen, Leo M., 4443 Paseo Blvd. 10
Multhauf, Cyril J., 5629 W. 50th St., Mission, Kan.
Mundy, William L., Professional Bldg. 6
Murphy, Robert J., 4301 Main St. 11
Myers, John S., Shukert Bldg. 6
Myers, Robert M., Rialto Bldg. 6
Myers, Wilson A., 425 Huntington Rd. 13
Needels, Orval T., 7400 Wornall Rd. 14
Nelson, Bentley A., 305 W. 43rd St. 11
Nelson, Charles S., Westphalia, Kan.
Nesselrode, John H., 10901 Winner Rd., Independence
Nickson, Charles E., Jr., 10901 Winner Rd., Independence
Nicolay, Kenneth S., 4635 Wyandotte St. 12
Nigro, Dominic M., 207 E. 51st Tr. 12
Nigro, E. Robert, 1047 W. 53rd Tr. 12
Nigro, Joseph A., 1055 W. 55th St. 13
Noltensmeyer, Milton N., 3305 W. 50th Tr., Shawnee Mission, Kan.
Nunn, Pat M., 1401 Southwest Blvd. 8
O'Brien, Leo A., Argyle Bldg. 6
O'Connell, Frank A., 7951 State Line 14
O'Connell, Gerald L., 12714 S. 71 Highway, Grandview
Ogilvie, John H., Box 157, Route 1, Gravois Mills
O'Hearne, John J., 4635 Wyandotte St. 12
O'Malley, James F., 4706 Broadway 12
O'Neil, James H., 425 E. 63rd St. 10
Osgood, George M., Medical Bldg., Prairie Village, Kan.
Ost, Mark D., 4720 Terrace St., 12
Overesch, Harry B., Professional Bldg. 6
Owens, Graham J., 152 W. Mezzanine, Union Station 8
Owens, Hugh H., 152 W. Mezzanine, Union Station 8
Owens, Michael J., 701 E. 45th St. 10
Owens, Richard L., 9228 E. Highway 50, 33
Owens, Robert H., 4706 Broadway 12
Ozar, Milton B., 701 E. 63rd St. 10
Padfield, Earl G., Jr., Plaza Broadway Bldg. 12
Pakula, Sidney F., 751 E. 63rd St., 10
Pallett, Harold A., Professional Bldg. 6
Parker, Elmer L., 3027 Campbell St. 9
Parker, Hubert M., Argyle Bldg. 6
Parsons, Eugene O., 315 Nichols Rd. 12
Passman, Harold, 701 E. 63rd St. 10
Pearson, Paul E., Rialto Bldg. 6
Peete, Don C., Professional Bldg. 6
Penner, Stanley, 1112 E. 76th Tr. 31
Perll, Maurice F., 830 W. 61st Tr. 13
Perll, Rita D., 830 W. 61st Tr. 13
Perry, Ralph, 4800 E. 24th St. 27
Peters, Evelyn L., Menorah Medical Center 10
Petersen, Arthur G., 9110 Ensley Lane, Prairie Village, Kan.
Peterson, Carl M., 2701 E. 31st St. 28
Peterson, George L., 6333 Brookside Plaza 13
Peterson, Milton C., 701 E. 63rd St. 10
Peterson, Walter R., 2701 E. 31st St. 28
Petry, Ezra L., 701 E. 63rd St. 10
Pfuetze, Edwin L., Plaza Parkway Bldg. 12
Pickard, Nicholas S., Plaza Time Bldg. 12
Pickens, Edgar E., 4826 Roanoke Parkway 12
Pierron, John B., 6516 Linden Rd. 13
Pinsker, Oscar T., Doctors Bldg. West 10
Piper, Donald K., Professional Bldg. 6
Pipkin, Garrett F., Argyle Bldg. 6
Pittam, Radford F., 418 Hyde Park, Hutchinson, Kan.
Polk, George M., Route 1, Box 3, Lee's Summit
Pollock, Leo H., 751 E. 63rd St. 10
Porter, Louis, 701 E. 63rd St. 10
Potter, Lee G., Professional Bldg. 6
Powell, Nelson E., St. Luke's Hospital 11
Powers, John M., 3304 Linwood Blvd. 28
Prentiss, Harry S., Rialto Bldg. 6
Preston, Albert, Jr., 4635 Wyandotte St. 12
Printz, Joseph H., 701 E. 63rd St. 10
Printz, Otto J., 701 E. 63rd St. 10
Pucci, Gregory L., 9923 Mercier St. 14
Pugh, Richard G., 317 W. Kansas St., Independence
Quer, Erich A., 701 E. 63rd St. 10
Quistgard, Paul C., 6741 Prospect St. 32
Rader, Ada B., Martin City
Ramey, Ehret O., 310 W. 47th St. 12
Ramos, John F., Jr., 2849 Indiana St. 28
Randolph, Andrew J., 2206 E. 18th St., 27
Rannie, Paul R., 709 S. Fuller St., Independence
Rector, Joe L., Jr., St. Luke's Hospital 11
Reinhardt, George R., Professional Bldg. 6
Reister, Philip D., 814 W. 74th St. 14
Reitz, Carl H., 7329 Broadway 14
Remley, George C., Argyle Bldg. 6
Reynolds, Clarence C., 2612 E. 39th St. 28
Rhoades, Arthur B., Professional Bldg. 6
Richardson, Marion W., 2526 Prospect St. 27
Richert, Robert C., General Hospital 8
Riller, Lowell E., Professional Bldg. 6
Rinkel, Herbert J., Bryant Bldg. 6
Roberts, Grosvenor G., 701 E. 63rd St. 10
Roberts, Harold M., Professional Bldg. 6
Roberts, Sam E., Professional Bldg. 6
Robinson, Arthur W., 6600 Wenonga Rd., Shawnee Mission, Kan.
Robinson, E. Kip, Professional Bldg. 6
Robinson, G. Wilse, Jr., 2625 Paseo Blvd. 8
Robinson, William J., 751 E. 63rd St. 10
Robison, James T., Jr., 4620 Nichols Parkway 12
Rodgers, Samuel U., 2701 E. 31st St. 28
Rose, Charles W., 334 S. Van Brunt St. 24
Rubin, Sidney, 701 E. 63rd St. 10
Rubnitz, Leon H., 701 E. 63rd St. 10
Rufe, John R., Bryant Bldg. 6
Russell, James L., 1016 W. 41st Place 11
Russell, Richard L., Professional Bldg. 6
Russell, Robert K., 63rd & Evanston St., Raytown
Saferstein, A. Lester, 6859 Cherry St. 31
Saladino, Anthony, Argyle Bldg. 6
Samuelson, Edward A., 4620 Nichols Parkway 12
Sanders, Harmon U., Jr., 10901 Winner Rd., Independence
Sanders, William F., 411 Nichols Rd. 12
Santoro, Carlos G., 4916 Central St. 18
Saper, Philip, 3 E. 3rd St., Lee's Summit
Sauer, Gordon C., 425 E. 63rd St. 10
Saunders, Everett L., 121½ W. Lexington St., Independence
Scarpellino, Louis A., St. Luke's Hospital 11
Schaerrer, Hans, 5110 White St. 29

Schaerrer, William C., 4635 Wyandotte St. 12
Schiffmacher, Jack E., 330 W. 47th St. 12
Schillie, Gene A., 4419 W. 71st Tr., Shawnee Mission, Kan.
Schorer, Edwin H., 5049 Wornall Rd. 12
Schottman, Gerhard W., Jr., St. Luke's Hospital 11
Schutz, Carl B., 320 W. 47th St. 12
Schutz, Richard B., Plaza Time Bldg. 12
Seeley, J. Bradford, 1808 W. Main St., Blue Springs
Seely, Clark W., Plaza Time Bldg. 12
Sewell, Minor F., 1722 W. 39th St. 11
Shapiro, Lazare M., 701 E. 63rd St. 10
Sheahon, John A., 7211 Richmond St. 33
Shecter, Nathan, 701 E. 63rd St. 10
Shelden, Russell D., 701 E. 63rd St. 10
Sheldon, John, 6305 Brookside Plaza 13
Shifrin, Alexander, 6824 Holmes St. 31
Shireman, Kenneth L., 4606 St. John St. 23
Shires, Edward B., 3600 Troost Ave. 9
Shockley, Clarence J., 231 W. 47th St. 12
Shofstall, Charles K., 300 W. 47th St. 12
Shuey, Herbert H., 3903 Brooklyn St. 30
Shypper, Moses J., 751 E. 63rd St. 10
Simon, Sanford, 701 E. 63rd St. 10
Sinclair, Alexander B., 920 W. 47th St. 12
Singleton, J. Milton, 315 Nichols Rd. 12
Skillman, Robert K., 10335 High Dr., Shawnee Mission, Kan.
Skinner, John O., Bryant Bldg. 6
Skinner, John T., Bryant Bldg. 6
Slentz, Edwin L., 4620 Nichols Parkway 12
Slentz, William A., 4620 Nichols Parkway 12
Slickman, R. A., 7721 State Line 14
Small, Walter L., Hyde Park Hotel 11
Smith, Arthur B., 101st St. & Holmes Rd. 10
Smith, Dale C., 231 W. 47th St. 12
Smith, H. Eugene, Plaza Time Bldg. 12
Smith, Ira T., Professional Bldg. 6
Smith, O. D., 7429 Riggs Lane, Overland Park, Kan.
Smull, Ned W., 7501 Mission Rd., Shawnee Mission, Kan.
Sneid, Philip, 701 E. 63rd St. 10
Snider, Samuel H., 722 Ward Parkway 12
Spafford, Allen L., 315 Nichols Rd. 12
Spurny, Otto M., 409 E. 63rd St. 10
Stacey, Wallace R., 10901 Winner Rd., Independence
Staggs, William A., Argyle Bldg. 6
Staley, Harry R., Bryant Bldg. 6
Starke, Helen, Queen of the World Hospital 27
(Sister Paula Theresa)
Statland, Harry, 751 E. 63rd St. 10
Statland, Morris, 751 E. 63rd St. 10
Steffen, Lawrence F., Professional Bldg. 6
Stegman, Elmer G., 6137 Blue Ridge Blvd. 33
Stein, Joseph W., Professional Bldg. 6
Stelle, Charles W., Box 1159, Bendix Corp. 41
Stelmach, Walter J., 7949 State Line 14
Stockton, Raymond W., 411 Nichols Rd. 12
Stockwell, A. Lloyd, Professional Bldg. 6
Stotts, Charles S., 8221 Nall Ave., Prairie Village, Kan.
Stratemeier, Edward H., Trinity Lutheran Hospital 8
Summers, Caldwell B., Plaza Theatre Bldg. 12
Swisher, Robert C., 425 E. 63rd St. 10
Switzer, Clyde, 8100 W. 54th Tr., Merriam, Kan.
Szabados, Ernest D., 1212 W. Truman Rd., Independence
Tarson, Solomon S., 3221 Troost Ave. 9
Tasker, Charles B., 30th & Wyandotte St. 8
Teall, Raymond E., 650 W. 56th St. 13
Terrill, Robert S., 208 Nichols Rd. 12
Tesson, James A., Rialto Bldg. 6
Theel, Otto W., Jr., 4301 Main St. 11
Thiele, George H., 6526 High Dr., Shawnee Mission, Kan.
Thomas, Christopher Y., 4706 Broadway 12
Thompson, Charles L., Plaza Time Bldg. 12
Thorn, Druery R., Plaza Medical Bldg. 12
Tice, Wayne K., Independence Sanitarium, Independence
Trippe, Harrison C., 6247 Brookside St. 13
Trowbridge, Barnard C., 415 E. 63rd St. 10
Trowbridge, Ellsworth H., 5317 W. 72nd St., Prairie Village, Kan.
Trowbridge, Ellsworth H., Jr., Professional Bldg. 6
Turner, Percy C., 1433 E. 19th St. 8
Tutera, Dominic F., Plaza Medical Bldg. 12
Tuthill, Herbert, Rialto Bldg. 6
Twin, Edward J., 701 E. 63rd St. 10
Twyman, Richard A., 4635 Wyandotte St. 12
Underwood, Dick H., Bryant Bldg. 6
Underwood, Harry A., 5100 E. 24th St. 27
Underwood, Johnson, Jr., Professional Bldg. 6
Underwood, Ross H., Bryant Bldg. 6
Unger, Harold, 701 E. 63rd St. 10
Upsher, Albert E., Argyle Bldg. 6
Valentine, Herbert S., 1020 W. 69th St. 13
Van Biber, James T., 3705 Northern Blvd., Independence
Van Buskirk, Terrance E., 5246 St. John Ave. 23
Van Buskirk, William C., Professional Bldg. 6
Vaughn, James W., Neurological Hospital 8
Vilmer, Charles, Professional Bldg. 6
Vincent, Jack C., 701 E. 63rd St. 10
Virden, Herbert H., Professional Bldg. 6
Voth, Harold W., Plaza Medical Bldg. 12
Wade, Frederick E., Professional Bldg. 6
Wakefield, Franklin, Jr., 1102 Grand Ave. 6
Walden, James M., 3325 Prospect Ave. 28
Walker, James C., 2727 Main St. 8
Walker, John W., Argyle Bldg. 6
Walker, Orville C., Jr., 11200 Winner Rd., Independence
Wall, Arthur H., 153 Santa Anita Ct., Sierra Madre, Calif.
Wall, Harry C., 751 E. 63rd St. 10
Wall, Leonard A., 4635 Wyandotte St. 12
Ward, Robert L., 4126 St. John St. 23
Watson, Ethel, First National Bank Bldg., Independence
Waxman, David, 4840 Prospect Ave. 30
Waxman, Jane Z., 4840 Prospect Ave. 30
Webster, Joseph G., Plaza Parkway Bldg. 12
Weiford, Edward C., 4706 Broadway 12
Welker, Joseph E., 6441 Summit St. 13
Wells, John H., 3718 Prospect Ave. 28
Weltscheff, Christo A., 1800 Blue Ridge Ext., Grandview
Wheeler, Charles B., 820 W. 57th St. 13
Wheeler, John H., 411 Nichols Rd. 12
White, Charles H., 6518 Overhill Rd., Prairie Village, Kan.
White, George A., Shukert Bldg. 6
White, Stoughton F., 4620 Nichols Parkway 12
White, William E., Argyle Bldg. 6
Whiteman, John R., 6314 Brookside Plaza 13
Whitman, Doyle C., Sharp Bldg. 6
Whitmore, J. Stewart, 8816 Fairway St., Shawnee Mission, Kan.
Wien, Irving A., Professional Bldg. 6
Wilhelm, Warren F., Professional Bldg. 6
Wilkinson, Charles B., 2200 McCoy St. 8
Wilkinson, Everett A., Professional Bldg. 6
Williams, Delon A., 1252 Stratford Rd. 13
Williams, Frank R., 4706 Broadway 12
Williams, George P., 10604 Blue Ridge Ext. 34
Williams, Joseph C., Jr., 425 E. 63rd St. 10
Williams, Luke E., 2201 E. 27th St. 27
Williams, Robert A., 3701 Broadway 11
Williams, Roland D., 305 W. 43rd St. 11
Williams, Starks J., 2701 E. 31st St. 28
Williams, Vincent T., Argyle Bldg. 6
Williamson, George L., Professional Bldg. 6
Willits, Lyle G., Professional Bldg. 6
Willoughby, Jean B., 5905 Main St. 13
Wilson, Clifford C., Plaza Time Bldg. 12
Wilson, Hester J., Plaza Time Bldg. 12
Winer, Herbert J., 751 E. 63rd St. 10
Winkelman, Esther B., 7449 Broadway 14
Winston, Bernard H., 751 E. 63rd St. 10
Wise, George W., 4620 Nichols Parkway 12
Withers, Orval R., Plaza Parkway Bldg. 12
Wolf, Jack W., 409 E. 63rd St. 10
Woods, Harold V., 808 S. 15th St., Blue Springs
Woods, Walton C., Medical Dept. TWA, Midcontinent Intl. Airport 8
Woodward, William W., 10901 Winner Rd., Independence
Wortmann, Robert F., 425 E. 63rd St. 10
Wright, R. Paul, Professional Bldg. 6
Wu, William Q., 63rd & Holmes St. 10
Yohe, Rugh M., 1710 Independence Ave. 6
Young, James E., 4635 Wyandotte St. 12
Young, Jesse W., 1401 Southwest Blvd. 8
Zellermayer, Jacob, 701 E. 63rd St. 10
Ziegler, Allen M., 8201 Tomahawk Rd. 15
Ziegler, Dewey K., 425 E. 63rd St. 10
Zuber, Harold V., Professional Bldg. 6

JASPER COUNTY MEDICAL SOCIETY
(Joplin)

Alberty, Omer L., Carl Junction
Allen, David O., Medical Arts Bldg.
Barnett, Norman H., Medical Arts Bldg.
Birsner, Frank H., 1717 River St., Carthage
Black, Mervin H., Financial Reserve Bldg.
Blanke, Otto T., 418 Wall St.
Burch, John E., Medical Arts Bldg.
Chesney, George W., Medical Arts Bldg.
Cohle, Richard R., 116 W. 3rd St., Carthage
Craig, Irwin T., Medical Arts Bldg.
Crawford, Archie L., Financial Reserve Bldg.
Crispell, Lawrence S., 6th & Pearl Ave.
Curl, Howard, 410 Jackson St.
DeTar, Burleigh E., 410 Jackson St.
DeTar, B. E., Jr., 410 Jackson St.
DeTar, George F., 410 Jackson St.
Douglass, Jesse E., 3560 Broadway, Kansas City 11
Eliscue, Juliette M., 2002 Jackson St.
Ferguson, L. H., Jr., Medical Arts Bldg.
Ferguson, Ralph L., Medical Arts Bldg.
Ferguson, Robert M., 110 N. Webb St., Webb City
Grantham, Samuel A., Jr., 420 Byers St.
Graves, F. Burton, 114 E. 32nd St.
Grubb, Paul H., 2509 Jackson Ave.
Hall, Marvin F., Financial Reserve Bldg.
Hamilton, Eugene H., Medical Arts Bldg.
Holtzman, Samuel, Medical Arts Bldg.
Hornback, Edward R., Financial Reserve Bldg.
Hurst, W. W., Medical Arts Bldg.
Isbell, Charles H., Carthage
Jeans, Virgil, Medical Arts Bldg.
Kiehl, Katharine, Miners Bank Bldg.
Kirschman, Robert E., Jackson at 26th St.
Koehler, John W., Medical Arts Bldg.
Kuhn, John R., Jr., Frisco Bldg.
Laney, Ronald L., 3140 Ocean St., Carlsbad, Calif.
Longenecker, Joe L., Financial Reserve Bldg.
McIntire, Emery J., 201 W. 3rd St., Carthage
McNew, William T., Carthage
McPike, Lloyd H., Financial Reserve Bldg.
Mack, Mary L., Address Unknown
Maddox, John D., 6th & Pearl St.
Meares, Cecil H., Jr., 420 Byers St.
O'Brien, James A., 545 N. 6th St., Muskogee, Okla.
Paddock, Charles S., Medical Arts Bldg.
Papp, Sandor D., Medical Arts Bldg.
Patterson, Donald R., 2509 Jackson St.
Patterson, Grover S., 506 S. Main St., Carthage
Poor, Carl W., Neosho
Post, Winfred L., 617 Joplin St.
Schoeberl, C. B., Medical Arts Bldg.
Schulte, G. A., 2125 Jackson St.
Scorse, Sidney W., 2509 Jackson St.
Smith, Roland T., Medical Arts Bldg.
Smith, William R., 304 Grant St., Carthage
Walker, Paul W., Medical Arts Bldg.
Webster, Roger W., 863 Cherry Way, Hayward, Calif.
Wetzel, Fred S., Jr., 202 W. Fourth St., Carthage
Whitten, M. Foster, 616 W. Centennial St., Carthage
Wieman, Harry K., Medical Arts Bldg.
Wilson, Alice H., 1923 Sergeant St.
Wood, George H., 1515 Hazel St., Carthage
Wooldridge, Bart F., Medical Arts Bldg.
Wright, George W., 222 S. Webb St., Webb City
Young, Calvin C., Jr., Financial Reserve Bldg.

JEFFERSON COUNTY MEDICAL SOCIETY

Allbee, Roger H., Crystal City
Bolgar, Bertalan, Festus
Carron, Joseph F., Festus
Commerford, James J., Crystal City
Donnell, Harold E., De Soto
Donnell, Robert H., Crystal City
Donnell, Thomas A., De Soto

Edwards, Waldo B., 11 N. Taylor Ave., Kirkwood
Fallet, Charles E., De Soto
Judge, Walter T., Crystal City
Kozal, Francis L., Crystal City
McKinstry, Karl V., De Soto
Mayfield, James L., Crystal City
Reich, Oliver F., Kimmswick
Rice, Carl E., Hillsboro
Rutledge, John F., Festus
Senn, Emmett J., Herculaneum
Sexauer, Arthur E., Ste. Genevieve
Yoskit, Harry, Festus

JOHNSON COUNTY MEDICAL SOCIETY

Cooper, R. Lee, Warrensburg
Damron, Oscar H., Warrensburg
Folkner, A. L., Warrensburg
Frein, Donald E., Leeton
Gonzalez, M. Garza, Warrensburg
Grove, Gulph W., Knobnoster
Harkness, Harry, Warrensburg
Johnson, Charles S., Warrensburg
Jones, Keith D., Warrensburg
Lederer, Charles M., Warrensburg
Maxson, T. Reed, Warrensburg
Rawlins, Kelly, Holden
Sprehe, Daniel J., Warrensburg

KNOX COUNTY

(North Central Counties Medical Society)

LACLEDE COUNTY

(Mid-Missouri County Medical Society)

LAFAYETTE-RAY COUNTY MEDICAL SOCIETY

Best, Robert, Higginsville
Brady, Hugh S., Concordia
Brasher, Ben H., Lexington
Cook, Thomas B., Richmond
Cope, Joseph S., Lexington
Crozier, Franklin A., Richmond
Davault, George K., Richmond
Fulkerson, Wilbur E., Higginsville
Goldberg, Isadore E., Braymer
Kelling, Douglas G., Waverly
Kelling, Jordan, Waverly
Koppenbrink, Walter E., Jr., Higginsville
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Martin, Wilfred E., Odessa
Payne, Bryan T., Lexington
Riley, Charles T., Richmond
Riley, Ralph W., Lexington
Ward, Joe, Lexington
Watson, Cecil L., Kahoka
Williams, John W., Oak Grove

LAWRENCE COUNTY

(Ozarks Medical Society)

LEWIS-CLARK-SCOTLAND COUNTIES MEDICAL SOCIETY

Bridges, James R., Kahoka
Davis, Landis Y., Canton
Ellery, William L., LaGrange

LINCOLN-ST. CHARLES COUNTY MEDICAL SOCIETY

(St. Charles)

Berry, Paul T., Troy
Bruns, Kenneth, St. Charles Clinic
Canty, Eugene J., 114 N. Main St.
Commerford, John F., 114 N. Main St.
Creech, Joseph C., Troy
Crider, Russell J., St. Charles Hotel Bldg.
Damron, Edward O., Elsberry
DuMontier, R. J., O'Fallon
Fleming, Robert J., 114 N. Main St.
Fong, Richard R., 220 Grand Ave., Oakland, Calif.
Hetlage, Louis P., Troy
Keller, Robert M., Wentzville
Kister, George E., 302 S. 2nd St.
Muenster, Vincent P., 206 Washington St.
Neubeiser, Ben L., 206 Washington St.
Penn, Robert M., Silex
Poggemeier, William H., Jr., 302 S. 2nd St.
Randall, Don Q., 220 S. 6th St.
Roter, Alexander M., St. Charles
Rother, Paul H., 114 N. Main St.
Schneider, Vincent A., 207 N. 5th St.
Shinkawa, Shigeo, St. Charles Clinic
Towers, Orville W., 114 N. Main St.
Yaeger, Gerald A., 9388 White Ave., St. Louis 17

LINN COUNTY

(Grand River Medical Society)

LIVINGSTON COUNTY

(Grand River Medical Society)

McDONALD COUNTY

(Ozarks Medical Society)

MACON COUNTY

(Chariton-Macon-Monroe-Randolph County Medical Society)

MADISON COUNTY

(Mineral Area County Medical Society)

MARIES COUNTY

(Mid-Missouri County Medical Society)

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY

(Hannibal)

Archer, Perry C., Shelbyville
Bach, Lysle M., 1737 Harrison Hill
Birney, William P., 213 S. 5th St.
Burns, Francis R., 711 Grand Ave.
Canella, John M., 707 Broadway
Fischer, Thomas J., 2910 St. Marys St.
Foreman, Phillip B., 711 Grand Ave.
Francka, Wenceslaus F., 603 Country Club Dr.
Glascock, Donald W., Palmyra
Greene, Harry L., Holmes Bldg.
Hamlin, Wyeth, 711 Grand Ave.
Hardesty, Joel W., Holmes Bldg.
Johnson, Charles R., U. S. Naval Hospital, MOR, San Diego, Calif.
Landau, Daniel B., 711 Grand Ave.
Lanning, Robert J., 115 N. 5th St.
Latimer, Walter N. A., 711 Grand Ave.
Lichty, Charles A., Shelbina
Lucke, Eugene M., Court House
Murphy, Bernard L., 2000 Crescent Dr.
Nigh, Charles A., 115 N. 5th St.
Plowman, Edward M., 711 Grand Ave.
Rapp, Earl L., 711 Grand Ave.
Roller, Merrill J., 2910 St. Marys St.
Shanahan, Mary P., Monroe City
Smith, Ulysses S., 222 S. 5th St.
Smith, William J., 108 N. 3rd St.
Steele, James C., Jr., 711 Grand Ave.
Strong, Richard M., 711 Grand Ave.
Sultzman, Francis E., 115 N. 5th St.
Sweets, Henry H., Jr., 1406 Market St.
Walterscheid, John H., 1209 Broadway
Well, J. W., Palmyra

MERCER COUNTY

(Grand River Medical Society)

MID-MISSOURI COUNTY MEDICAL SOCIETY

(Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties)

Andreassen, Dimil F., Rolla
Bass, B. J., Salem
Baumann, A. R. Steelville
Butts, James D., Rolla
Carrington, Howard W., Lebanon
Casey, Shederic A., Lebanon
Crosby, Alice S., Salem
Doty, Roy J., 1123 S. Cherry St., Ada, Okla.
Drake, Avery A., Rolla
Elders, Frank A., Jr., Cuba
Feind, Earl E., Rolla
Fisher, George E., Lebanon
Froelich, Rae W., Lebanon
Garrison, T. W., Camdenton
Grosskreutz, Joseph A., St. James
Hammler, Christiana V., St. James
Hart, Martin M., Salem
Holley, Donald B., Camdenton
Hope, James L., Lebanon
Hunt, Lloyd H., Salem
Hurst, Ben B., Lebanon
Irwin, William F., Leasburg
Jenkins, Paul A., Lebanon
Johnson, Ferrell H., Lebanon
Lytle, William R., Rolla
Miller, Clyde S., Waynesville
Mitchell, Roy E., Salem
Myers, James M., Rolla
Riffel, Gordon W., Bourbon
Russell, Barbara E., Rolla
Scott, Elijah A., St. James
Stricker, Emil A., St. James
Summers, Jacob H., Lebanon
Underwood, Millard K., Rolla
Young, Robert B., Rolla

MILLER COUNTY MEDICAL SOCIETY

Buehler, Carl T., Jr., Eldon
Shelton, Edward O., Eldon

MINERAL AREA COUNTY MEDICAL SOCIETY

(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Charles H., Rivermines
Brennan, John A., Farmington
Bugg, Andrew F., Lordsberg, N. M.
Bull, Ben M., Ironton
Carleton, Charles E., Jr., Farmington
Chastain, Charles W., Farmington
Cresswell, George F., Potosi
Crouch, F. Richard, Farmington
Dennis, W. Paul, Flat River
Farrar, C. B., 721 North Middle St., Cape Girardeau
Foster, Jack L., Desloge
Gaebe, Harold C., Desloge
Gay, George, Ironton
Grossman, Marvin, Fredericktown
Harland, R. E., Ironton
Haw, Marvin T., Jr., Bonne Terre
Hoctor, Emmett F., Farmington
Huckstep, Robert A., Farmington
Hunt, John W., Jr., Leadwood
Karraker, Alvan G., Farmington
Lanning, Richard C., Ste. Genevieve
Menne, Marvin C., Ironton
Michaelis, Charles E., Fredericktown
Mullen, Jack, Bonne Terre
Oliver, George A., Farmington
Roebber, Harry M., Bonne Terre
Slaughter, Shelby C., Fredericktown
Taylor, Van W., Bonne Terre
Watkins, George L., Jr., Farmington

MISSISSIPPI COUNTY

(Semo County Medical Society)

MONITEAU COUNTY MEDICAL SOCIETY

Fulks, Richard B., California
Gallagher, Lionel M., California
Kibbe, Edgar A., California
Latham, Kenyon S., California
McDonald, Terrence J., Poplar Bluff

MONROE COUNTY

(Chariton-Macon-Monroe-Randolph County Medical Society)

MONTGOMERY COUNTY MEDICAL SOCIETY

Andersen, Elmer J. T., Montgomery City
Byland, Samuel J., Wellsville
Helm, James O., New Florence
Hirsch, Albert, Vandalia

MORGAN COUNTY MEDICAL SOCIETY

Gunn, Jack, Versailles
Kauffman, Ruth, Versailles
Lyle, Robert R., Versailles
Washburn, J. L., Versailles

NEW MADRID COUNTY

(Semo County Medical Society)

NEWTON COUNTY

(Ozarks Medical Society)

NODAWAY-HOLT-ATCHISON-GENTRY-WORTH COUNTIES MEDICAL SOCIETY

Bare, Edward F., Tarkio
Bauman, Henry C., Maryville
Bell, Charles T., Maryville
Blacklock, David E., King City
Byland, Benjamin F., Maryville
Carlin, Albert L., Stanberry
Carpenter, Wallace, Rock Port
Cossins, Carlos E., State Hospital 2, St. Joseph
Dunshee, Robert E., Maryville
Humphrey, James, Mound City
Imes, Elvin D., Maryville
Jackson, William R., Maryville
Kirk, Charlie W., Hopkins
Matteson, Frank B., Grant City
Niedermeyer, Edward L., Tarkio
Perry, David C., Mound City
Rose, Frank H., Albany
Wanamaker, John M., Rock Port
Wempe, G. Raymond, Maryville

NORTH CENTRAL COUNTIES MEDICAL SOCIETY
(Adair-Schuyler-Knox-Sullivan-Putnam Counties)

Cramb, Arthur B., 711 C. E. Orange St., Lakewood, Fla.
English, Milton T., Jr., Kirksville
Freeman, Spencer L., Kirksville
Grim, Edward M., Kirksville
Hart, Pearl V., Coatsville
Hasselblad, Oliver W., 297 Park Ave. S., New York 11, N. Y.
Hilton, Paul E., Kirksville
Holman, Jurney H., 2516 N. Pecan, Nacogdoches, Tex.
Isom, Waldo B., Knox City
Jones, John B., Kirksville
Luman, Frank E., Edina
Stickler, Ralph O., Kirksville
Sullivan, William J., V. A. Hospital, Providence 8, R. I.
Tarvydas, Francis, Edina
Wimp, J. J., Kirksville

OREGON COUNTY
(South Central Counties Medical Society)

OSAGE COUNTY
(Unorganized)

OZARK COUNTY
(South Central Counties Medical Society)

OZARKS MEDICAL SOCIETY
(Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald Counties)

Adriany, Joseph, State Sanatorium, Mount Vernon
Alsup, Frederick F., Box 276, Kalispell, Mont.
Anderson, Paul B., Neosho
Aubin, Francis W., Branson
Bailey, Alan B., State Sanatorium, Mount Vernon
Bennett, Joseph D., Indian Trail, Little Rock, Ark.
Blankenship, George W., Neosho
Bowman, Melvin C., Neosho
Brasher, Charles A., Mount Vernon
Brown, Frederick B., Aurora
Burney, Wallace S., Miller
Capetti, Alex P., Crane
Carter, James R., Neosho
Coffman, Esther E. L., 1514 13th N., Lakeworth, Fla.
Cohnberg, Rosellen E., Monett
Cowan, R. D., Aurora
Davis, Paul C., Neosho
Donley, Robert R., Monett
Edwards, Francis L., Monett
Evans, Harry T., Branson
Gillespie, Roy, Branson
Glass, William J., Jr., Monett
Glover, Kenneth, Mount Vernon
Graves, Arthur J., Mount Vernon
Hamilton, William P., Aurora
Hellweg, Charles E., Mount Vernon
Hobbs, George H., Mount Vernon
Imes, Clifford H., 11065 Linden St., Lynwood, Calif.
Kenney, Roy E., Neosho
Kerr, Frank T., Monett
Lamson, Roy C., Neosho
Langeluttig, Harry V., Mount Vernon
Lentz, Harold C., Neosho
McCallum, A. J. C., Aurora
Magness, William C., Branson
Maples, Floyd H., Mount Vernon
Mars, Hartley F., Forsyth
Morrison, T. A., Aurora
Newman, Mary J. N., Cassville
Olive, George C., Neosho
Price, Charles H., Cassville
Reynolds, James R., Neosho
Rogers, Donald B., Nixa
Roper, Stanley D., Ozark
Royce, J. J., Noel
Shumate, L. St. Clair, Reeds Spring
Stokes, Julius B., Excelsior Springs
Sweany, Henry C., Mount Vernon
Taylor, Leo T., Neosho
Threadgill, Jesse M., Forsyth
Whitehead, Frank F., Neosho
Wilson, Daniel R., Mount Vernon
Wommack, Fred L., Crane
Yates, J. Lewis, Mount Vernon

PEMISCOT COUNTY MEDICAL SOCIETY

Acuff, William J., University of Tennessee, Knoxville, Tenn.
Aquino, Philip J., Caruthersville
Bryant, William O., Hayti
Cain, Charles F., Caruthersville
Caldwell, Jacob D., Hayti
Chapman, J. R., Steele
Cook, O. W., Caruthersville
Cooke, James K., Jr., Box 142 Qtrs. 136 A, NAS, Cecil Field, Fla.
Cooper, Lawrence E., 1274 Hanton St., Fort Myers, Fla.
Denton, Levi D., Hayti
Duckworth, John K., 5583 Lochlomond St., Memphis, Tenn.
Grable, James, Portageville
Gubin, Alan S., Caruthersville
Hensley, Daniel R., Wardell
Limbaugh, Walter R., 8275 Lagoon Rd., Fort Myers, Fla.
McCoy, Warren R., Caruthersville
McKaskle, Clarence W., Caruthersville
Morris, Clyde L., Caruthersville
Painter, Andrew E., Portageville
Painter, L. B., Jr., Portageville
Shirey, Arnold G., Hayti
Smith, Robert S., Portageville
Strittmatter, James C., Caruthersville

PERRY COUNTY MEDICAL SOCIETY

Carron, Oscar A., Perryville
DeGenova, G. H., Ste. Genevieve
Fairchild, James F., Perryville
Feltz, L. W., Perryville
Fischer, Theodore, Altenburg
Legner, Stanley G., Perryville
Lutkewitte, Joseph F., Ste. Genevieve
McDermott, Alfred E., Perryville
Miller, Oliver J., Cape Girardeau
Utterman, William F., Perryville

PETTIS COUNTY MEDICAL SOCIETY
(Sedalia)

Beckemeyer, William A., 500 W. 16th St.
Bess, William E., 210½ S. Ohio St.
Boger, James W., 500 W. 16th St.
Brady, Charles H., Gordon Bldg.
Campbell, A. J., 312½ S. Ohio St.
Carlisle, John B., 1019 W. 6th St.
Daum, Harold F., Bothwell Hospital
Dyer, David P., 2511 Stephenson St.
Edwards, D. R., 700 Limit Ave.
Ewert, J. O., 412½ S. Ohio St.
Fisher, Stanley D., Sedalia
Gonser, Karl B., 101 S. Ohio St.
Hite, Henry A., Green Ridge
Hopkins, Thomas J., 700 S. Limit Ave.
Hopkins, T. Spencer, 1609 S. Limit Ave
Lamy, John E., 509 W. Broadway
Long, Frank B., Gordon Bldg.
Lowe, Alvin L., 1425 S. Grand Blvd.
Maddox, Albert R., 116½ W. Main St.
Osborne, Charles D., 710 W. Broadway
Parkhurst, Charles L., Houstonia
Proctor, Donald C., 700 S. Limit Ave.
Rhodes, Euhlan L., Warsaw
Roberts, Paul A., Sweet Springs
Rodeman, John M., Gordon Bldg.
Siegel, Carl D., 1216 W. 18th St.
Siegel, Peter V., Smithton
Stauffacher, C. Gordon, 700 Limit Ave.
Stewart, Robert H., Bothwell Hospital
Walter, Archie L., 500 W. 16th St.
Worley, Charles A., Sweet Springs

PHELPS COUNTY
(Mid-Missouri County Medical Society)

PIKE COUNTY MEDICAL SOCIETY

Andrae, Robert L., Louisiana
Biggs, James B., Bowling Green
Christensen, Roger F., Louisiana
Hooker, John H., 3935 Connecticut Ave., St. Louis 16
Johnson, Q. Ray, Jr., Box 877, Gadsden, Ala.
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Martin, W. Joe, Louisiana
Middleton, John W., Louisiana
Scott, Clive D., Louisiana
Wilcoxen, William B., Bowling Green

PLATTE COUNTY MEDICAL SOCIETY

Blackwell, Charles W., Platte City
Calvert, Lewis C., Weston
Jennings, Ethlyn C., Rt. 4, N. Kansas City
Parker, H. Graham, Platte City
Robinson, John A., Edgerton
Thurman, H. C., Parkville

POLK COUNTY
(Dallas-Hickory-Polk County Medical Society)

PULASKI COUNTY
(Mid-Missouri County Medical Society)

PUTNAM COUNTY
(North Central Counties Medical Society)

RALLS COUNTY
(Marion-Ralls-Shelby County Medical Society)

RANDOLPH COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

RAY COUNTY
(Lafayette-Ray County Medical Society)

REYNOLDS COUNTY
(Mineral Area County Medical Society)

RIPLEY COUNTY
(Butler-Wayne-Ripley County Medical Society)

ST. CHARLES COUNTY
(Lincoln-St. Charles County Medical Society)

ST. CLAIR COUNTY
(West Central Missouri Medical Society)

ST. FRANCOIS COUNTY
(Mineral Area County Medical Society)

STE. GENEVIEVE COUNTY
(Mineral Area County Medical Society)

ST. LOUIS MEDICAL SOCIETY
(St. Louis)

Abell, Walter E., 2253 S. 39th St. 10
Abrams, Morris, 4405 W. Pine Blvd. 8
Acker, Harry L., 6150 Oakland Ave. 10
Ackerman, Lauren V., 600 S. Kingshighway Blvd. 10
Adams, James T., 40 Delafield Rd., Fort Leonard Wood
Adler, Benard C., 500 N. Skinker Blvd. 30
Agress, Harry, 634 N. Grand Blvd. 3
Ahern, Archibald M., 3915 Watson Rd. 9
Ahlering, George H., 950 Francis Pl. 5
Aitken, Louis F., 3720 Washington Blvd. 8
Albrecht, Franklin H., 245 Union Blvd. 8
Alden, Arthur M., 906 Olive St. 1
Aldrich, James T., 2621 Franklin Ave. 6
Alexander, Harry L., 52 Maryland Plaza 10
Allen, Henry C., Clayton Medical Bldg. 5
Allen, Hollis N., 634 N. Grand Blvd. 3
Allen, Melvin A., 3701 Grandel Square 8
Allen, Willard M., 630 S. Kingshighway Blvd. 10
Allen, William E., Jr., 720 N. Sarah St. 8
Altheide, J. Paul, 607 N. Grand Blvd. 3
Alvis, Bennett Y., 100 N. Euclid Ave. 8
Alvis, Edmund B., 100 N. Euclid Ave. 8
Anstey, George, 4660 Maryland Ave. 8
Apicella, Frank V., 1324 St. Ange Ct. 4
Arneson, A. N., 457 N. Kingshighway Blvd. 8
Arney, William G., 16 Hampton Village Plaza 9
Aronberg, Lawrence M., 2120 S. Warson Rd. 24
Arzt, Franz, 1790 E. Las Olas Blvd., Ft. Lauderdale, Fla.
Auer, Arthur I., 8505 Gannon Ave. 32
Aufderheide, G. Russell, 2326 Noll Dr. 36
Austin, Martin G., 119 Summit Ave. 19
Ayars, Treston R., 607 N. Grand Blvd. 3
Aylward, Howard J., 410 Dielman Rd. 32
Azzouni, J. N., 8816 Gravois Ave. 23
Backer, Matthias H., Jr., 3923 Watson Rd. 9
Baggot, Michael G., 853 McKinley Blvd., Alton, Ill.
Bailey, Drennan, 6356 Clayton Rd. 30
Bailey, Frank A., 3108 S. Grand Blvd. 18
Bailey, Fred W., 4610 23rd Ave. N., St. Petersburg, Fla.
Balazs, Karl J., 3623 Cleveland Ave. 10
Bandle, Donald F., 5400 Arsenal St. 39
Banet, Samuel R., 7301 St. Charles Rock Rd. 33
Banton, William C., 2917 St. Louis Ave. 6
Barden, Frank W., 41 Beaver Dr., Creve Coeur
Bardenheier, J. Phil, 3903 Olive St. 8
Barker, Jesse W., 1504 S. Jefferson Ave. 4
Barnes, Charles R., 3400 Loma Vista Rd., Ventura, Calif.
Barrett, Scott R., 5086 Easton Ave. 13
Bartels, Leo G., 906 Olive St. 1
Bartlett, Robert W., 100 N. Euclid Ave. 8

Bartlett, Willard, Jr., 634 N. Grand Blvd. 3
Bartnick, Mitchel L., 7615 S. Broadway 16
Bassett, Robert B., 5427 Delmar Blvd. 12
Bauer, John D., 2415 N. Kingshighway Blvd. 13
Bauer, Maria, 1935 Edison Ave., Granite City, Ill.
Bauer, Otto, 1935 Edison Ave., Granite City, Ill.
Baumgarten, Walter, Jr., 3720 Washington Blvd. 8
Bawell, Malcolm B., 4660 Maryland Ave. 8
Beare, J. Byron, 3720 Washington Blvd. 8
Becke, William G., 3720 Washington Blvd. 8
Becker, Bernard, 640 S. Kingshighway Blvd. 10
Becker, Edward J., 906 Olive St. 1
Becker, George H., 4500 Olive St. 8
Becker, Stanley C., 8110 Roxburgh Dr. 24
Beckette, Edmund S., 950 Francis Pl. 5
Beckman, Donald E., 4205 Virginia Ave. 11
Behrens, Donald T., 6 Thorndell Dr. 17
Belew, Joe E., 3271 January Ave. 39
Bell, Robert M., 3720 Washington Blvd. 8
Benincasa, Anthony V., 3731 Goodfellow Blvd. 20
Benjamin, Durand, 7430 Virginia Ave. 11
Bennett, Thomas T., 4500 W. Pine Blvd. 8
Berard, Louis N., 812 Olive St. 1
Berg, Leonard, 52 Maryland Plaza 8
Berg, Ralph, 3203 S. Grand Blvd. 18
Bergman, Hugo F., 3720 Washington Blvd. 8
Bergner, Grace E., 114 N. Taylor Ave. 8
Berland, Harry I., 812 Olive St. 1
Berman, Joseph P., 1225 N. Grand Blvd. 6
Berman, William, 462 N. Taylor Ave. 8
Bernard, Harvey R., 4960 Audubon Ave. 10
Berry, John W., 950 Francis Pl. 5
Bersche, Bertram L., 5214 Pernod Ave. 9
Bettonville, Paul J., Jr., 6331 Pershing Ave. 30
Bilsky, Nathan, 2739 N. Grand Blvd. 6
Bindbeutel, Arthur H., 5203 Chippewa St. 9
Bindbeutel, D. A., 630 Westborough Pl. 19
Binder, Morton A., 4652 Maryland Ave. 8
Birdsall, Thomas C., 4660 Maryland Ave. 8
Bircher, John L., 3932 Federer Pl. 16
Birsner, Louis J., 634 N. Grand Blvd. 3
Bisno, Daniel, 8000 Bonhomme Rd. 5
Blache, J. Owen, 4924 Lotus Ave. 13
Blair, Vilray P., Jr., 100 N. Euclid Ave. 8
Blalock, William N., 114 N. Taylor Ave. 8
Bleyer, Adrien S., 607 N. Grand Blvd. 3
Block, Arnold S., 634 N. Grand Blvd. 3
Bock, Lux H., 1504 S. Grand Blvd. 4
Bockelman, Clifford H., 2615 Brentwood Blvd. 17
Boedeker, Roy V., 100 N. Euclid Ave. 8
Boemer, Lilburn C., 3720 Washington Blvd. 8
Boggs, Roy E., 1515 Lafayette Ave. 4
Bohne, William R., 4500 Olive St. 8
Bohrer, Harry C., 607 N. Grand Blvd. 3
Boldizar, Albert G., 3720 Washington Blvd. 8
Boldt, Thomas H., Northland Medical Bldg. 36
Bolton, Robert L., 3947 Jamieson Ave. 9
Bond, Leslie F., 5801a Easton Ave. 12
Bondurant, Bryce H., 134 Frontenac Forest 31
Bonfanti, Albert L., 3225 Longfellow Blvd. 4
Boswell, John R., 1 Country Fair Lane 24
Bowdern, Edward H., 634 N. Grand Blvd. 3
Bowles, G. Robert, 5525 Enright Ave. 12
Bowerman, Harold H., 607 N. Grand Blvd. 3
Bowersox, Warren A., 100 N. Euclid Ave. 8
Boyd, Arthur M., 1703 S. Grand Blvd. 4
Bradley, Frank R., 600 S. Kingshighway Blvd. 10
Bradley, Richard V., 100 N. Euclid Ave. 8
Bremser, Harry L., 1105 Tower Grove Ave. 10
Brennan, George A., 3606 Gravois Ave. 16
Brennan, Robert A., 3606 Gravois Ave. 16
Brennan, Robert V., 637 West Adams St. 22
Brereton, Robert L., 206 N. Clay Ave. 35
Bricker, Eugene M., 100 North Euclid Ave. 8
Brittingham, Thomas E., 6242 Waterman Ave. 5
Brodeur, Armand E., 141 Horseshoe Dr. 22
Bronson, Shael S., 100 North Euclid Ave. 8
Brookes, Henry S., Jr., 37 Algonquinwood Pl. 22
Brookes, Robert D., 4652 Maryland Ave. 8
Brooks, Arthur C., 60 Kingsbury Pl. 12
Broun, Goronwy O., 1325 S. Grand Blvd. 4
Broun, Goronwy O., Jr., 6359 Waterman Ave. 5
Brown, E. Eugene, 379 N. Taylor Ave. 8
Brown, James B., 100 N. Euclid Ave. 8
Brown, James L., 5400 Arsenal St. 9
Brown, Seymour, 2 Ricardo Lane 24
Browning, S. Pearce, III, 4523 McKinley Ave. 10
Bruce, Helen L., 3263 Hawthorne Blvd. 4
Bryan, James H., 950 Francis Pl. 5
Bryan, William T. K., 950 Francis Pl. 5
Budd, John J., Jr., 9313 Manchester Rd. 19
Budil, Edward J., 23 Faculty Lane 30
Bulger, Harold A., 4405 West Pine Blvd. 8
Burford, Cyrus E., 812 Olive St. 1
Burford, E. Humber, 812 Olive St. 1
Burke, Robert J., 6379 Devonshire Ave. 9
Burkhart, Edward F., 634 N. Grand Blvd. 3
Burmeister, R. William, 9308 Boxton Dr.
Burns, Francis J., 4660 Maryland Ave. 8
Burst, Donald O., 6500 Chippewa Ave. 9
Busch, Anthony K., 16 Hampton Village Plaza 9
Butcher, Harvey R., Jr., 4960 Audubon Ave. 10
Byars, Louis T., 100 N. Euclid Ave. 8
Byrne, John E., 4660 Maryland Ave. 8
Caciolo, Carlo, 1325 S. Grand Blvd. 4
Cadice, John B., 6029 Harney Ave. 20
Calkins, Delevan, 8505 Delmar Blvd. 24
Calodney, Martin M., 7247 Delmar Blvd. 5
Camel, H. Marvin, 310 Tanglewood Dr. 24
Campbell, Cecil S., 812 Olive St. 1
Campos, Francisco J., 100 N. Euclid Ave. 8
Cannon, Edward M., 607 N. Grand Blvd. 3
Cannon, William J., 4952 Maryland Ave. 8
Cappel, Powel B., 3284 Ivanhoe St. 39
Caravelli, Anthony F., 8015 Audrain Dr. 21
Carlin, M. Richard, 1211 S. Brentwood Blvd. 17
Carney, Joseph E., Jr., 906 Olive St. 1
Carney, Roscoe P., 1515 Lafayette Ave. 4
Carr, Archie D., 3720 Washington Blvd. 8
Carroll, George A., 607 N. Grand Blvd. 3
Carroll, Grayson, 3720 Washington Blvd. 8
Carter, William W., 35 N. Central Ave. 5
Cason, Elbert H., 4401 Hampton Ave. 9
Cassel, Melvin A., 3400 N. Kingshighway Blvd. 15
Catanzaro, Anthony F., 2705 Clifton Ave. 39
Catanzaro, Francis J., 1401 Birch Ave., Las Vegas, Nev.
Chamness, James T., 3 Town & Country Dr. 24
Charles, Benjamin H., 3720 Washington Blvd. 8
Charles, Cecil M., 110 S. Central Ave. 5
Charnas, Raymond M., 607 N. Grand Blvd. 3
Cherre, Anthony J., 950 Francis Pl. 5
Cherre, Charles J., 10 Haddington Ct. 5
Chieffi, Margaret, 3720 Washington Blvd. 8
Ciapciak, Stanley J., 1901 Madison St. 6
Cibis, Paul A., 3720 Washington Blvd. 8
Clancy, James F., 607 N. Grand Blvd. 3
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Clark, James F., 864 Hamilton Ave. 12
Cleary, Frank, 1935 Park Ave. 4
Cleveland, Horace F., 1325 Somerset Pl., Long Beach 7, Calif.
Clisham, John F., 1316 Dillon Dr. 4
Clithero, William H., 1763 Royal Oak Dr., Duarte, Calif.
Coffin, Ernest L., 145 Vassar Dr., Lake Worth, Fla.
Cohen, Benjamin H., 138 N. Meramec Ave. 5
Cohen, Louis, 950 Francis Pl. 5
Colbert, James W., Jr., 1402 S. Grand Blvd. 4
Cole, William R., 1401 Lawnwood Dr. 23
Collodi, George A., 20 Southcote Dr. 17
Comens, Phillip, 6500 Chippewa St. 9
Comens, Ruth C., 8715 Gayle Ave. 26
Conrad, Adolph H., Jr., 3720 Washington Blvd. 8
Conrad, Marshall B., 41 N. Central Ave. 5
Cook, Jerome E., 4409 West Pine Blvd. 8
Cook, Ralph L., 44 Nolan Dr. 22
Cooper, Henry T., 818 Olive St. 1
Cooper, Theodore, 934 Coffey Dr. 26
Cooper, Thomas J., 100 N. Euclid Ave. 8
Copher, Glover H., 600 S. Kingshighway Blvd. 10
Copp, Ralph, Jr., 3720 Washington Blvd. 8
Cordonnier, Justin, 4960 Audubon Ave. 10
Correnti, Nicholas A., 100 N. Euclid Ave. 8
Costa, Dominic V., 16 Hampton Village Plaza 9
Costello, Cyril J., 100 N. Euclid Ave. 8
Costello, Joseph P., 1211 S. Brentwood Blvd. 17
Costello, Joseph P., Jr., 57 Berkshire St. 17
Costen, James B., 3720 Washington Blvd. 8
Coughlin, Bertrand D., 607 N. Grand Blvd. 3
Cox, Mary E., 4500 West Pine Blvd. 8
Coxe, William S., 600 S. Kingshighway Blvd. 10
Crego, Clarence H., Jr., 634 N. Grand Blvd. 3
Criscione, James R., 634 N. Grand Blvd. 3
Crossman, Robert W., 1509 Holly Dr. 19
Crowell, Hugh C., 9764 Tesson Ferry Rd. 23
Cummings, James H., 424 N. Euclid Ave. 8
Curran, George L., 7241 Greenway Ave. 30
Cutler, Harold M., 150 N. Meramec St. 5
Cutter, Edgar B., APO 331, San Francisco, Calif.
Czebrinski, Edward W., 3701 Grandel Sq. 8
Daake, John W., 48 Portland Pl. 8
Dabbs, LeRoy, 1420 N. Taylor Ave. 13
Dahms, Gustave, 1452 S. Grand Blvd. 4
Dalton, Arthur R., 4500 Olive St. 8
Daman, George A., 6500 Chippewa St. 9
Dames, Richard J., 7735a Brookline Tr. 17
Danis, Peter G., 150 N. Meramec St. 5
Dankner, Arnold, 150 N. Meramec St. 5
Davidson, John D., 600 Union Blvd. 8
Davie, Joseph, 4615 Lindell Blvd. 8
Davis, Frank L., 6123 Westminster Pl. 12
Davis, Martin W., 490 Oakwood St. 19
Davis, Myron W., 3720 Washington Blvd. 8
Deakin, Rogers, 607 N. Grand Blvd. 3
Demko, Frank, 2330 S. 9th St. 4
Demko, William, 12214 Mentz Hill Rd. 28
Denk, Alan F., Ft. Benjamin Harrison, Indianapolis, Ind.
DePew, Heber B., 1446 S. Grand Blvd. 4
Devine, John B., 85 Willmore Rd. 9
Devine, Joyce E., New England Medical Center, Boston 15, Mass.
Diehr, Alvin H., 634 N. Grand Blvd. 3
DiLeo, Senatro W., Northland Medical Bldg. 36
Dmytryk, Eugene T., 607 N. Grand Blvd. 3
Dodd, Robert B., 600 S. Kingshighway Blvd. 10
Dolan, John T., Jr., 1517 Kenilworth Dr. 17
Donahoe, James L., 7336 Princeton Ave. 5
Donaldson, Robert C., 915 N. Grand Blvd. 6
Dorsett, E. Lee, 150 N. Meramec St. 5
Doubek, John C., 2767 Gravois Ave. 18
Doubek, John C., Jr., 2767 Gravois Ave. 18
Doyle, Charles R., 634 N. Grand Blvd. 3
Drace, Charles C., 3702 Gravois Ave. 16
Drace, Charles C., Jr., 19 E. Lockwood Ave. 19
Drake, Truman G., 114 N. Taylor Ave. 8
Drake, William L., Jr., 307 S. Euclid Ave. 10
Drennan, James A., 6130 Washington Ave. 12
Drews, Leslie C., 508 N. Grand Blvd. 3
Drey, Norman W., 634 N. Grand Blvd. 3
Dreyer, Carl J., 204 Kingsville Ct. 19
Dripps, Roy C., 7702 Ivory Ave. 11
Dubuque, Theodore J., Jr., 634 N. Grand Blvd. 3
Duden, Charles W., 3720 Washington Blvd. 8
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Dunham, Richard B., 3720 Washington Blvd. 8
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Bergmann, John F., 818 Risdon Dr. 35
Bergmann, Martin, 4409 West Pine Blvd. 8
Berndsen, Gerard H., 1220 Oakleaf Dr. 19
Bernstein, Aaron M., 7033 Cornell Ave. 30
Bernstorff, Paul H., 10093 W. Florissant Ave. 36
Berwald, Irwin I., 747 Old Bonhomme Rd. 32
Bialock, Jane Frisch, 26 Ventor Dr., Totteridge, N. 20 London, England
Birenbaum, Aaron, 462 N. Taylor Ave. 8
Bishop, Marion D., 751 St. Francois St., Florissant
Bishop, Mary M., 17 Royal Ave. 35
Black, James M., 327 Church St., Carrollton, Ill.
Blackman, Nathan, 300 Altus Pl. 22
Blankenship, Dale M., Ballwin
Boles, Clifford R., 35 N. Central Ave. 5
Bolinske, Robert E., 1204 Francis Pl. 17
Bortnick, Arthur R., 520 Midvale Ave. 30
Brand, Earl L., 120 E. Lockwood Ave. 19
Braufman, Harvey S., 111 Church St. 35
Brennan, Patricia A., 1617 S. Brentwood Blvd. 17
Briscoe, John R., 2648 Oakview Tr. 17
Brother, George M., 34 N. Brentwood Blvd. 5
Brown, Eugene R., 7433 Gannon Ave. 30
Brown, William S., 3903 Olive St. 8
Burford, Thomas H., 9131 Clayton Rd. 24
Burnside, Charles R., 206 W. Argonne Dr. 22
Burstein, Robert, 100 N. Euclid Ave. 8
Bussmann, Donald W., 908 Crescent Dr. 5
Cacioppo, Joseph E., 3400 N. Kingshighway Blvd. 15
Callahan, Donald E., Northland Medical Bldg. 36
Calman, Carl H., 138 N. Meramec Ave. 5
Canepa, Francis J., 7215 Northmoor Dr. 5
Canepa, John B., 3417 Longfellow Blvd. 4
Carlson, Arne E., 3109 Brown Rd. 14
Carroll, Percy J., 40 Briarcliff 24
Carter, Edwin E., 6500 Chippewa St. 9
Catanzaro, Rudolph E., 24 Foxboro Rd. 24
Chinsky, Murray, 6223 Natural Bridge Rd. 20
Ciampa, Thomas, 114 E. Lockwood Ave. 19
Coates, Thomas A., 1200 S. Big Bend Blvd. 17
Cohen, Frank, 10822 St. Charles Rock Rd., St. Ann
Coldwater, Kenneth B., 1520 Ridgewood Dr. 26
Coleman, William G., 3903 Olive St. 8
Collins, John M., 6432 Hampton Ave. 9
Compton, James R., 1090 Valna Dr., Whittier, Calif.
Cone, Alfred J., 2 Woods Mill Rd., Chesterfield
Costrino, John J., 922 Jeanerette Dr. 30
Costrino, Joseph A., 2407 N. Broadway 6
Cowdry, Edmund V., Jr., 3720 Washington Blvd. 8
Crawford, Katherine J., 7115 Washington Blvd. 30
Cullum, Albert G. J., 920 Dorchester Ave., Middlesboro, Ky.
Cutler, Harry, 607 N. Grand Blvd. 3
Daughaday, William H., 600 S. Kingshighway Blvd. 10
Davidson, Morris, 35 N. Central Ave. 5
Davis, Edgar W., 3720 Washington Blvd. 8
Davis, Irl R., 1506 Hodiamont St. 12
Dean, Lee W., Jr., 101 S. Meramec St. 5
DeHovitz, Bernard, 950 Francis Pl. 5
Deitchman, Robert B., 457 N. Kingshighway Blvd. 8
Deutch, Max, 8515 Delmar Blvd. 24
Deyton, John W., 1617 S. Brentwood Blvd. 5
Dickler, Donald J., 833 Audubon Dr. 5
Diehr, Maurice A., 9385 Page Blvd. 14
Dill, Foster A., 7346 Manchester Ave. 17
Doisy, Robert A., 103 Edwin Ave. 22
Donley, Leo F., Jr., 2739 N. Grand Blvd. 6
Dowd, James F., Jr., 30 W. Brentmoor Park 5
Drescher, Emmett B., 3720 Washington Blvd. 8
Drum, Helen M. A., 1412 Spoede Rd. 24
Duane, George W., 9105 Sioux Dr. 23
Duggan, John J., Jr., 333 S. Kirkwood Rd. 22
Dulick, Michael, 9012 Manchester Rd. 17
Ebel, Eugene H., 10011 Bellefontaine Rd. 15
Eber, Carl T., 308 N. 6th St. 1
Ecker, Decider B., Pacific
Efron, Joseph, 1116 Olivaire 32
Eidelman, Jack R., 4652 Maryland Ave. 8
Eisenstein, Albert B., 818 S. Meramec Ave. 5
Eller, C. Howe, 801 S. Brentwood Blvd. 5
Ellis, Calvin C., 11627 Fallbrook Dr. 31
Ellison, Leroy E., 7346 Myrtle Ave. 17
Elson, Julius, 5 Granada, La Hacienda 24
Emerson, Reynolds L., 1695 Brentwood Blvd. 17
Engleman, Reinhold, Northland Medical Bldg. 36
Ernst, Joseph G., 68 Fortune Lane 22
Estes, Jack M., 8307 Jennings Rd. 36
Eversoll, Norton J., 6356 Clayton Rd. 17
Fairshter, Alex E., 9 Blackpool Lane 32
Falk, O. P. J., 18 S. Kingshighway Blvd. 8
Feldaker, Robert M., 5463 Delmar Blvd. 12
Feldman, David, 150 N. Meramec St. 5
Ferrara, John P., Northland Medical Bldg. 36
Fingerhood, Marvin G., 1434 Chambers Rd. 35
Fingert, H. H., 12 Hortense Pl. 8
Finkel, Barney W., 6510 W. Florissant Ave. 20
Finley, Freeman L., 2475 Hartland Ave. 14

Fleming, Paul D., 110 S. Central Ave. 5
Fletes, James W., 5601 Lindell Blvd. 12
Flynn, Thomas T., 150 N. Meramec St. 5
Forsman, Waldo W., Jr., 4128 S. Lindbergh Blvd. 26
Forsyth, B. Todd, 3720 Washington Blvd. 8
Foster, Robert L., 5641 Sutherland Ave. 9
Fox, Leon J., 634 N. Grand Blvd. 3
Franklin, Harold A., 606 S. Meramec St. 5
Freiheit, Harold J., 17 Ladue Manor 24
Friedman, Robert H., 150 N. Meramec Ave. 5
Froelich, Edwin J., 7321 Overbrook Dr. 21
Froelich, Robert E., 1606 Winter St., Augusta, Ga.
Fuchs, George J., 1 Fawnridge Ct., Creve Coeur
Gaines, Quentin M., 136 W. Mermod St. 22
Gale, Philip R., 7811 Carondolet Ave. 5
Gall, Ira, 630 S. Kingshighway Blvd. 10
Gaston, Ralph E., 1 Lynnbrook Rd. 31
Gaunt, Frank P., 203 W. Cedar Ave. 19
Gay, Elizabeth K., 2221 Duchess Dr. 30
Gearhart, Wilbur H., 25 Graeson Ct. 41
Gibstine, Marvin H., 10517 St. Charles Rock Rd., St. Ann
Gieselman, Ralph V., 4952 Maryland Ave. 8
Gitt, Joseph J., 1025 S. Warson Rd. 24
Goldenberg, Sidney, 4409 West Pine Blvd. 8
Goldman, Hyman J., 457 N. Kingshighway Blvd. 8
Gollub, Samuel W.. 8112 Delmar Blvd. 30
Goodman, J. N., 9 Frederick Lane 22
Goodman, Nathaniel, 8307 Jennings Rd. 36
Goodrich, Harold A., 19 E. Lockwood Ave. 19
Gowen, Leo F., 1114 Cheshire Lane 19
Grabau, Gene H., 8036 N. Broadway 15
Graeser, Richard G., 464 N. Taylor Ave. 22
Gray, Walter C., 8711 St. Charles Rd. 14
Green, Manuel E., 1625 Tower Grove Ave. 10
Greenman, Marshall B., 950 Francis Pl. 5
Griot, Albert J., 3109 S. Grand Blvd. 18
Gronau, Axel R., 7062 Waterman Ave. 30
Grundmann, William H., 634 N. Grand Blvd. 3
Hagemann, Paul O., 3720 Washington Blvd. 8
Hale, Tyre H.. 4903 Delmar Blvd. 8
Hall, Eugene W., 116 S. Florissant Rd. 35
Halpern, Lawrence K., 905 Francis Pl. 5
Hamilton, Caldwell K., 35 N. Central Ave. 5
Hampton, Oscar P., Jr., 8153 Stanford Ct. 30
Hamtil, Edward W., 1504 S. Grand Blvd. 4
Hans, Willard J., 4335 Virginia Ave. 11
Hardy, Guerdan, 110 S. Central Ave. 5
Harrington, William J., 600 S. Kingshighway Blvd. 10
Harris, Hinman A., 7331 Canton St. 30
Harrison, Stanley L., 16 Devondale Lane 31
Hawkins, Lee W., 950 Francis Pl. 5
Heid, Lloyd L., 2739 N. Grand Blvd. 6
Heideman, Milo L., 7708 Weston Pl. 17
Helbing, Edward J., 950 Francis Pl. 5
Hendin, Aaron, 9636 Old Bonhomme Rd. 32
Hengen, Henry E., 11223 St. Charles Rock Rd., Bridgeton
Hershey, Falls B., 6621 Waterman Ave. 30
Hertel, Albert L., 5212 Miami St. 9
Hobbs, Alonzo G., 3903 Olive St. 8
Hobbs, John E., 603 S. Kingshighway Blvd. 10
Hofsommer, Armin C., 337 W. Lockwood Ave. 19
Hogancamp, Charles E., 333 S. Kirkwood Rd. 22
Holscher, Edward C., 41 N. Central Ave. 5
Howe, Albert L., 601 S. Brentwood Blvd. 5
Howe, Louis F., 8806 Harrison Ave. 17
Huck, Frank F., Fenton
Hughes, Robert G., Olive & Ballas Rds., Creve Coeur
Irick, Carl C., 227 E. Lockwood Ave. 19
Izmirlian, Grant, 731 E. Big Bend Blvd. 22
Jacobs, Frederick A., 111 Church St. 35
Jick, Sidney, 457 N. Kingshighway Blvd. 8
Johnson, Roy, 40 N. Florissant Rd. 35
Jones, Dorothy J., 110 S. Central Ave. 5
Jones, James B., 9335 Sonora Ave. 17
Jones, Victor, 2240 St. Clair Ave. 17
Joseph, Harold J., 227 Tanglewood Dr. 24
Jotte, Richard F., 10300 St. Charles Rock Rd., St. Ann
Kahn, Lawrence, 150 N. Meramec St. 5
Kardesch, Milton, 9316 Lodge Pole Lane 26
Karsh, Robert S., 8339 Delcrest Dr. 5
Kelley, Walter L., 9915 Gravois Rd. 23
Kendis, Joseph B., 462 N. Taylor Ave. 8
Kessler, Joseph J., 3504 N. 14th St. 7
Kilker, Clarence H., 3121 N. Grand Blvd. 7
Kilker, Donald E., 3121 N. Grand Blvd. 7
Kimelman, Nathan, 21 Granada Way 24
King, Eustace E., III, 2114 E. Grand Blvd. 7
Kingsland, Robert C., 14 Forsyth Walk 5
Kipnis, David M., 1251 Buck Ave. 17
Klippel, Allen P., 1101 Donna Ct. 24
Kloecker, Herman J., 9616 Lackland Ave. 14
Kloeppel, Carl F., Route 12, Box 212, 22
Knock, Henry L., 145 W. Adams St. 22
Koch, Robert E., 35 N. Central Ave. 5
Koerner, Kenneth A., 950 Francis Pl. 5
Koessel, Arthur W., 634 N. Grand Blvd. 3
Konzelmann, John A., 6677 Delmar Blvd. 30
Kopp, Jules H., 462 N. Taylor Ave. 8
Korn, Robert L., 150 N. Meramec Ave. 5
Krieger, John L., 28 Berry Road Park 19
Kurth, Robert K., 6500 Chippewa St. 9
Kuttner, Marianne, 8515 Delmar Blvd. 24
Lansche, W. Edward, 809 Leber Dr. 22
Larkin, Rosemary R., 7917 Harlan Ave. 23
Leonhardt, Erwin M., 3946 Jamieson Ave. 9
Lerman, George S., 6318 Southwood Ave. 5
Lerner, Abe F., 7545 Parkdale Ave. 5
Leslie, Charles H., 209 S. Kirkwood Rd. 22
Levey, Simon A., 8334 Delcrest Dr. 24
Levin, Marvin E., 7818 Stanford Ave. 30
Lewin, Wilbur H., 906 Olive St. 1
Lipschitz, Ervin, 101 S. Meramec Ave. 5
Lohr, Robert W., 610 N. Lafayette Ave., Florissant
London, Stanley L., 462 N. Taylor Ave. 8
Long, Frank B., 100 N. Euclid Ave. 8
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Luedde, Fullerton W., 35 N. Central Ave. 5
Luke, Herbert K., 819 Locust St. 1
Lund, Herluf G., 16 Hampton Village Plaza 9
Lund, Robert H., 110 S. Central Ave. 5
McCall, Edwin L., 9012 Manchester Rd. 17
McCarthy, Thomas D., 607 East Dr. 21
McClure, David N., 950 Francis Pl. 5
McGinnes, William F., 8230 Forsyth Blvd. 5
McKee, Oliver A., N. Kirkwood Road & Washington St. 22
McLean, Royal C., 520 W. Jewel Ave. 22
McManamon, Thomas V., 525 St. Francois Ave., Florissant
McMurray, Herbert C., Ballwin
McNalley, Frank P., 950 Francis Pl. 5
McNalley, Michael, 950 Francis Pl. 5
McNearney, Joseph, 7308 Glades Ave. 17
Magee, Charles D., 418 Olive St. 2
Magee, William E., 4952 Maryland Ave. 8
Magidson, Joseph, 615 Forest Ct. 5
Magness, Guy N., 6651 Enright Ave. 30
Mahe, George A., 8039 Park Dr. 17
Manganaro, Frank J., 1617 S. Brentwood Blvd. 17
Marcus, Morris D., 607 N. Grand Blvd. 3
Margolis, Richard M., 1630 Bay Meadows, Florissant
Marmor, William A., 607 N. Grand Blvd. 3
Martin, Frederick W., Jr., 12 Eversdale Ct. 17
Martz, John C., 237 Spencer Rd. 19
Mattis, Robert D., 21 Brentmoor Park 5
Maxwell, Richard W., 5257 Lindell Blvd. 8
May, Benjamin F., 736 Audubon Dr. 5
Mayer, Robert A., 950 Francis Pl. 5
Meador, James R., 4 S. Central Ave. 5
Meagher, Arthur J., 3805 S. Broadway 18
Mendelson, David F., 150 N. Meramec St. 5
Mendonsa, Elsa L., 504 N. Central Ave. 5
Merrims, Theodore, 7873 Wayne Ave. 30
Merritt, Burch A., 7309 Natural Bridge Rd. 21
Merz, Jean J., 117 Frontenac Forest 31
Meyer, James E., Ballwin
Mezera, Raymond A., 7135 Forsyth Blvd. 5
Milder, Benjamin, 100 N. Euclid Ave. 8
Miles, Paul W., 100 N. Euclid Ave. 8
Miller, Charles, Jr., 206 N. Fillmore Ave. 22
Minnihan, Robert W., 6327 Lynbrook Dr. 23
Missey, Wilburn C., Jr., 12047 Conway Rd. 31
Molden, Charles A., 36 Bellerive Acres 21
Monat, Seymour, 100 N. Euclid Ave. 8
Moore, Harry G., 917 S. 18th St. 3
Moore, Walter L., 6 Clayton Tr. 31
Moore, William E., 7315 Pasadena Blvd. 21
Mueller, Robert J., 16 Hampton Village Plaza 9
Mullarky, Wilbur A., 7 Beaver Dr. 24
Murphy, John C., 3720 Washington Blvd. 8
Nakada, James R., 950 Francis Pl. 5
Nash, W. Hampton, 819 Locust St. 1
Nelson, J. Roger, 35 N. Central Ave. 5
Newport, Gerald, 21 Stoneyview, Creve Coeur
Noller, Henry W., 3720 Washington Blvd. 8
Nuetzel, John A., 950 Francis Pl. 5
Nussbaum, Robert A., 3701 Grandel Sq. 8
Oakley, John E., 601 S. Brentwood Blvd. 5
O'Bannon, L. W., Jr., 390 St. Anthony Lane, Florissant
O'Connor, Robert J., 751 St. Francois St., Florissant
O'Keefe, Joseph D., 206 N. Clay Ave. 22
O'Neal, Patricia, 4580 Scott Ave. 10
Ott, Harold J., 2816 Sutton Ave. 17
Ottensmeyer, Charles D., 2035 Goodale Ave. 14
Paddock, Richard, 6154 Westminster Pl. 12
Paris, William H., 3121 N. Grand Blvd. 7
Park, George M., Box 6, Eureka
Parker, Brent M., 4960 Audubon Ave. 10
Pawol, S. E., 2573 Woodson Rd. 14
Pennoyer, James, 117 Plant St. 19
Perry, H. Mitchell, 31 Hill Dr. 22
Perry, William D., 100 N. Euclid Ave. 8
Peterson, Frederick D., 8225 Clayton Rd. 17
Peugnet, Hubert B., 1617 S. Brentwood Blvd. 17
Phillips, Hanford, 1117 N. Union Blvd. 13
Pilla, Lawrence A., 6833 Graham Rd. 34
Pipes, Keith E., 9001 West Pine Blvd. 17
Platt, William R., 57 Ridgemoor Dr. 5
Rachlin, Maxwell, 1617 S. Brentwood Blvd. 17
Ragland, John E., Ballwin
Redington, James C., Jr., 1 Tuscany Park 5
Reese, A. Victor, 120 E. Lockwood Ave. 19
Reiches, Aaron J., 150 N. Meramec St. 5
Reilly, Pierce J., 730 Hodiamont Ave. 12
Reinhard, Edward H., 235 Sylvester Ave. 19
Reiss, Eric, 6326 Waterman Blvd. 5
Reister, Dorothy D., 814 W. 74th St., Kansas City
Reitman, Stanley, 8 Heartwoods Ct. 32
Rennard, Marvin, 4652 Maryland Ave. 8
Repp, Theodore J., 9311 Duenke Dr. 37
Reynolds, Fred, 4960 Audubon Ave. 10
Riggio, Salvatore N., 9901 Gravois Rd. 23
Roberts, Harold K., 110 S. Central Ave. 5
Roberts, John P., Barrett Station Rd. 22
Roberts, John R., 100 N. Euclid Ave. 8
Robertson, Frank G., 634 N. Grand Blvd. 3
Robinson, Edith C., 2 Briar Oak 32
Roblee, Melvin A., 101 S. Meramec Ave. 5
Rogers, C. H., 812 Olive St. 1
Rogers, John A., 527 Warren Ave. 30
Rohlfing, Edwin H., 8230 Forsyth Blvd. 24
Rolufs, Lloyd S., 135 W. Adams Ave. 22
Roodman, Herman J., 15 N. Brentwood Blvd. 5
Rosecan, Marvin, 100 N. Euclid Ave. 8
Rosenbaum, Herbert E., 100 N. Euclid Ave. 8
Rosenberg, Henry E., 1467 N. Union Blvd. 13
Ross, Herman C., 1695 Brentwood Blvd. 17
Roth, Daniel, 1087 N. Hanley Rd. 30
Roufa, Joseph F., 539 N. Grand Blvd. 3
Rouse, Ernest T., 100 N. Euclid Ave. 8
Rubenstein, Melvin, 4500 Olive St. 8
Rubin, Robert, 8515 Delmar Blvd. 30
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Rutledge, Paul E., 411 N. Kirkwood Rd. 22
Ryan, John J., 28 Ridgetop 17

Salisbury, William J., 445 Bellerive Blvd. 11
Saltzstein, Sidney, 1460 Oriole Pl. 17
Schaan, Robert C., 9293 Watson Rd. 26
Schattyn, Martyn, 539 N. Grand Blvd. 3
Schechter, Samuel E., 8000 Bonhomme Rd. 5
Scheele, Paul M., 411 N. Kirkwood Rd. 22
Schlansky, Seymour M., 7247 Delmar Blvd. 30
Schluer, Elmer P., 3720 Washington Blvd. 8
Schmidt, Edmund M., 6704 W. Florissant Ave. 20
Schneider, Sam, 4652 Maryland Ave. 8
Schopp, Alvin C., 539 N. Grand Blvd. 3
Schultz, Samuel, 2813 Watson Rd. 9
Schuman, Stanley H., 1427 E. Park Pl., Ann Arbor, Mich.
Schwartz, Melvin M., 4652 Maryland Ave. 8
Schwartzman, Bernard, 4652 Maryland Ave. 8
Seabaugh, Ottis D., 105 W. Lockwood Ave. 19
Seabold, John A., 408 Mission Ct. 30
Shatz, Burton A., 4652 Maryland Ave. 8
Shepherd, C. T., 1259 N. Kingshighway Blvd. 13
Shobe, Frank O., 4500 West Pine Blvd. 8
Silverberg, Charles, 45 Rio Vista Dr. 24
Simril, Wayne A., 35 N. Central Ave. 5
Sisk, James C., 110 S. Central Ave. 5
Skilling, David M., Jr., 18 S. Kingshighway Blvd. 8
Skinner, John S., 31 Willow-Hill Rd. 24
Smit, Herbert M., 539 N. Grand Blvd. 3
Smith, George E., 637 Tarrymore Lane 22
Smith, William A., Rt. 1, Box 122M, Somerton, Ariz.
Sommer, Ross B., 100 N. Euclid Ave. 8
Speno, Angelo A., 1071 Raritan Dr. 19
Spitz, Milton A., 1108 N. 20th St., Milwaukee 3, Wis.
Spitzer, Ernest, 6637 Kingsbury Blvd. 30
Spoeneman, Marlin C., 7380 Overbrook Dr. 21
Staehle, Melvin E., 7124 Natural Bridge Rd. 20
Stein, Harry J., 6917 W. Florissant Ave. 20
Stein, Leonard A., 2618 Oregon Ave. 18
Steiner, Alexander J., 3720 Washington Blvd. 8
Stephens, William A., 462 N. Taylor Ave. 8
Sterling, Charles E., 8105 Page Blvd. 30
Sterling, John A., 7266 Manchester Ave. 17
Stevens, Robert W., 9311 Duenke Dr. 37
Stewart, Frances H., 7161 Delmar Blvd. 30
Stickle, A. W., 812 Olive St. 1
Stocking, Lyman C., 14 Sweetbriar Lane 22
Strauchen, Gilbert W., 337 W. Lockwood Ave. 19
Stude, William C., 16 Hampton Village Plaza 9
Stuebner, Roland W., 35 N. Central Ave. 5
Susman, Irvin C., 216 S. Kingshighway Blvd. 10
Sutphin, John B., 111 Church Rd. 35
Sutter, Richard A., 7215 Greenway Ave. 30
Tashma, Sigmund, 5847 Pershing Ave. 12
Teiber, Frederick W., 3201 Washington Blvd. 3
Thiele, Belmont R., 10261 Thornwood Dr. 24
Thiele, O. K., 340 Main St., St. Charles
Tobias, Norman, 700 S. Meramec St. 5
Tomlinson, William L., 357 Violet Lane 19
Torin, Bernice A., 951 Old Bonhomme Rd. 32
Townsend, James A., 915 DeMun Ave. 5
Townsend, Vincent F., 7532 Byron Pl. 5
Tremain, E. E. 2901 Big Bend Blvd. 17
Treiman, Robert C., 7 Radnor Rd. 22
Trueblood, Alva C., Jr., 325 N. Kirkwood Rd. 22
Trunko, Leo, 1900 Telegraph Rd. 23
Tureen, Louis L., 457 N. Kingshighway Blvd. 8
Turner, James K., 8473 Colonial Lane 24
Ulett, George A., 54 Picardy Lane 24
Ulett, Pearl C., 54 Picardy Lane 24
Uyeno, Frank S., 12712 Topping Acres 31
Valach, Frank J., 1617 S. Brentwood Blvd. 17
Vatterott, Paul B., 10300 St. Charles Rock Rd., St. Ann
Vinyard, Paul, 3718 Olive St. 8
Vitale, Anthony J., 7130 Natural Bridge Rd. 34
Vitale, Nicholas S., 7130 Natural Bridge Rd. 34
Vizgird, J. J., 3511 University St. 7
Vollmar, Clarence J., 8787 Big Bend Rd. 19
Votaw, Robert E., 10 Warson Tr. 24
Walker, Harvey, Jr., 4515 Gibson Ave. 10
Walker, Willard B., 110 S. Central Ave. 5
Wall, Albert, 5322 Helen Ave. 20
Walther, Roy A., Jr., 7 High Acres 32
Waters, E. B., 126 E. Jefferson Ave. 22
Weber, Sol, 607 N. Grand Blvd. 3
Weber, William K. 4323 Gladwyn Dr., Bridgeton
Weinhaus, Robert S., 7165 Delmar Blvd. 30
Weisbrod, Wilfred B., 1025 North & South Rd. 30
Weisman, Renate D., 10517 St. Charles Rock Rd., St. Ann
Weisman, Sol, 4652 Maryland Ave. 8
Weitman, Maximilian, 3530 Arsenal St. 18
Wenneker, Alvin S., 950 Francis Pl. 5
Werth, Duncan S., 233 N. Sappington Rd. 22
West, Joseph W., 906 Olive St. 1
Westrup, Arthur W., 8540 E. Big Bend Blvd. 22
Westrup, Ellsworth A., 8540 E. Big Bend Blvd. 22
Whitener, Miles C., 8923 Midland Blvd. 14
Whitener, Paul R., 8923 Midland Blvd. 14
Wiedershine, Leonard J., 634 N. Grand Blvd. 3
Williamson, O. E., 6336 Clayton Rd. 17
Wissmath, Frank S., 35 N. Central Ave. 5
Wittler, Harry A., 2817 Manderly Dr. 17
Wood, James A., Clayton Medical Bldg. 5
Wulff, George J. L., Jr., 6 Graybridge Lane 24
Wyatt, Lois C., 134 W. Adams Ave. 22
Yanow, Mitchell, 201 S. Central Ave. 5
Yost, Walter B., 5351 Delmar Blvd. 12
Young, John S., 3400 N. Kingshighway Blvd. 15
Zeitler, Walter A., 2554 Hord Ave. 36
Zimmerman, Herbert B., 8026 Comstock St. 14
Zuckner, Jack, 150 N. Meramec St. 5
Zwirn, Benjamin H., 9811 W. Florissant Ave. 36

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Knipschild, B. F., Marshall
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Lawrence, John R., Marshall
McBurney, Alexander A., Naval Supply Center, Stockton, Calif.
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McCorkle, E. Lee, Marshall
Madison, Waite H., Marshall
Mead, Samuel T., Slater
Mullinax, Orr, Marshall
Nix, Winston K., Marshall
Reid, James A., Marshall
Roberts, Paul A., Sweet Springs (Member Pettis County Medical Society)
Roehrs, Marvin E., Marshall
Sullivan, B. Hazard, Miami
Worley, Charles A., Sweet Springs (Member Pettis County Medical Society,

SCHUYLER COUNTY
(North Central Counties Medical Society)

SCOTLAND COUNTY
(Lewis-Clark-Scotland County Medical Society)

SCOTT COUNTY
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Buckthorpe, Thelma C., Sikeston
Chandler, Orville B., New Madrid
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Critchlow, William C., Sikeston
Davis, Wilbur L., Charleston
Dernoncourt, John E., Charleston
Dieckman, William C., Dexter
Dunaway, Howard A., Sikeston
Ellis, Burnett E., Gideon
Ferguson, Wilson J., Sikeston
Finney, William O., Chaffee
Frazier, Robert L., Charleston
Heeb, Max A., Sikeston
Husted, George W., Parma
Jones, Edward E., Lilbourn
McClure, Thomas C., Sikeston
Marshall, Alfred H., Charleston
Martin, Andrew D., Sikeston
O'Dell, Timothy T., Oran
Parks, Stephen, Bloomfield
Popp, Carl G., Sikeston
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Roberson, John H., Lilbourn
Rolwing, E. Charles, Charleston
Sample, George A., Chaffee
Sargent, Alden P., Sikeston
Sargent, John P., Sikeston
Sarno, S. M., Morehouse
Smith, Audra B., Sikeston
Smith, Louis J., New Madrid
Throgmorton, Howard B., Sikeston
Tribble, Robert E., Chaffee
Urban, Edgar D., Sikeston
Waddle, Theodore L., Dexter
Waltrip, Roy T., Jr., Sikeston
Whitaker, Topsey T. H., East Prairie

SHANNON COUNTY
(Carter-Shannon County Medical Society)

SHELBY COUNTY
(Marion-Ralls-Shelby County Medical Society)

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Coffee, Amos L., Willow Springs
Connor, Samuel W., Mountain Grove
Cooper, Claude W., Thayer
Denney, Richard W., Mountain Grove
Doan, Deborah, Bakersfield
Dryer, William F., Houston
Fowler, Marvin L., West Plains
Frame, Homer G., 1216 Cherry St., Springfield
Gentry, Marvin C., Ava
Hogg, Garrett S., Jr., Cabool
Miller, Harold W., Willow Springs
Norman, Robert M., Ava
Randall, Leslie, Licking
Smith, Rollin H., West Plains
Spears, Joe L., Cabool
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Tiffany, D. E., Mountain View
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Ashley, Mrs. Thomas E., Route 12, Box 1057
Atkinson, Mrs. Thomas E., Jr., Route 3, Box 1036c
Auner, Mrs. Cecil, 649 McCann St.
Baldwin, Mrs. Richard, 600 S. Glenstone St.
Bonebrake, Mrs. MacDonald D., 1443 Delaware St.
Brown, Mrs. Alex L., 2424 Sheridan Blvd.
Brown, Mrs. Lyman D., 1212 N. Sherman St.
Burkey, Mrs. Jordan W., 2405 Sheridan Blvd.
Busiek, Mrs. Paul, Route 9, Box 598
Busiek, Mrs. Urban, 1635 E. Walnut St.
Callaway, Mrs. Guy D., 1155 S. Delaware St.
Callaway, Mrs. Guy D., Jr., 901 E. Portland St.
Cheek, Mrs. W. Carey, 1534 E. Meadowmere St.
Clarke, Mrs. Michael J., 2416 Brentwood Blvd.
Clary, Mrs. William F., 2259 Mirabeau St.

Clawson, Mrs. James W., 2305 E. Latoka St.
Clayton, Mrs. Edgar L., 2446 Brentwood Blvd.
Cochran, Mrs. Thomas E., Jr., 2423 Brentwood Blvd.
Coller, Mrs. Frederick C., 2433 Marlan St.
Conrad, Mrs. Raymond C., 1338 S. Delaware St.
Crawford, Mrs. Oral B., 1445 Wayland St.
Cunningham, Mrs. Darral D., 1425 S. Delaware St.
Delzell, Mrs. William A., Route 1, Willard
Dietz, Mrs. Mortimer Wendell, 2540 Edgewater St.
Dillard, Mrs. Erin M., 2530 S. Marlan St.
Duncan, Mrs. Robert D., 1234 E. Loren St.
Elkins, Mrs. Ronald F., 2830 E. Glenwood St.
Ellis, Mrs. Francis J., 2235 E. Glenwood St.
Evans, Mrs. Ezra L., Jr., 1260 E. Catalpa St.
Farthing, Mrs. Fred R., 1234 E. Walnut St.
Farthing, Mrs. Gene W., 1235 E. Walnut St.
Ferguson, Mrs. John P., Sr., 1045 E. Linwood Dr.
Ferguson, Mrs. John P., 1219 S. Clay St.
Ferrell, Mrs. Thomas E., Jr., 1525 E. Meadowmere St.
Fessenden, Mrs. Ersel N., 634 Kingsbury St.
Fitch, Mrs. Max, 2523 S. Marlan St.
Francis, Mrs. William C., 2134 Luster St.
German, Mrs. Walter A., Jr., 2659 Luster St.
Glynn, Mrs. Robert R., 1101 Benton St.
Gorelick, Mrs. David P., 1041 Linwood Ter.
Gose, Mrs. Don F., 1339 S. Delaware St.
Griot, Mrs. George A., 1640 E. Sunshine St.
Hahn, Mrs. Andrew L., 1344 E. Portland St.
Hall, Mrs. Durward G., Route 12, Box 445
Hanan, Mrs. Ernest B., 724 E. Kingsbury St.
H'Doubler, Mrs. Francis T., Route 7
H'Doubler, Mrs. Francis T., Jr., 2336 E. Glenwood St.
Hollis, Mrs. Richard, 2178 Catalina St.
Horton, Mrs. James D., 1235 E. Delmar St.
Ivy, Mrs. H. B., 215 E. Sunshine St.
Jameson, Mrs. James E., 2753 Luster St.
Johnson, Mrs. Warford B., 2244 Edgewood St.
Johnson, Mrs. William F., 1858 S. Jefferson St.
Johnston, Mrs. Joseph L., 1855 S. Jefferson St.
Key, Mrs. James S., 2117 Valley Rd.
Klingner, Mrs. George Malcolm, 2003 E. Sunshine St.
Knabb, Mrs. Henry F., Jr., Route 8, Box 1078
Knabb, Mrs. Kenneth E., 1229 E. Catalpa St.
Kolze, Mrs. Vernon W., 1854 Valley Rd.
Kooiker, Mrs. Clarence, 1512 S. Kings St.
Langston, Mrs. Walter R., 1453 S. Fairway Ter.
Lemmon, Mrs. George Bruce, Jr., 648 S. Florence St.
Leslie, Mrs. James F., 1418 Benton St.
Litton, Mrs. Lyle, 3044 Shalimar St.
Lockhart, Mrs. Charles E., 1600 E. Catalpa St.
Lowe, Mrs. Horace Arch, Jr., 1700 E. Walnut St.
McAlhany, Mrs. Howard J., 1643 E. Catalpa St.
McCraw, Mrs. Doyle C., Bolivar (Polk County)
Manire, Mrs. John, 3061 S. Dayton St.
Maple, Mrs. Francis M., 2230 Mirabeau St.
Moore, Mrs. DeArmond, U. S. Medical Center
Moseley, Mrs. F. Thomas, 2102 S. Dollison St.
Napper, Mrs. Marvin L., Ash Grove
Overend, Mrs. Don S., 2215 Catalina St.
Palcheff, Mrs. Chris L., 1939 E. Wayland St.
Park, Mrs. William I., Jr., 815 E. Portland St.
Penninger, Mrs. William H., 2246 E. Claiborne St.
Peterson, Mrs. Stanley S., 721 E. Stanford St.
Plumlee, Mrs. William C., 919 E. Walnut St.
Polk, Mrs. John W., 1560 S. Delaware St.
Powell, Mrs. Edwin M., 807 S. Weller St.
Prater, Mrs. Bill George, 657 S. Weller St.
Pruett, Mrs. Paul L., 1036 E. Sunshine St.
Purcell, Mrs. Elmer M., 2347 E. Latoka St.
Rigney, Mrs. Levi M., 1561 S. Fairway Ter.
Roper, Mrs. Stanley D., Ozark (Christian)
Russell, Mrs. Earl D., 2102 Cinderella St.
Scanlon, Mrs. Robert C., 2429 S. Kings St.
Schwartz, Mrs. Eugene J., 1315 E. Loren St.
Schweitzer, Mrs. Fred C., Jr., 2550 S. Luster St.
Sewell, Mrs. Walter S., 2707 S. Marlan St.
Siceluff, Mrs. Joseph C., Route 3
Silsby, Mrs. Don, 932 S. Pickwick St.
Simpson, Mrs. Albert P., 2202 Barataria St.
Simpson, Mrs. Emerson L., 1023 E. Portland St.
Smith, Mrs. Harvey S., 963 S. Delaware St.
Snead, Mrs. William H., Jr., 2532 Sheridan St.
Stamm, Mrs. Richard, 601 S. Florence St.
Stewart, Mrs. Robert Bell, 2360 E. Grand St.
Stewart, Mrs. R. Wendell, 2028 Windsor Dr.
Tarrasch, Mrs. Ernest L., 2114 Langston St.
Thomasson, Mrs. David D., 2311 E. Glenwood St.
Tillman, Mrs. Walter W., Jr., 1220 E. Loren St.
Turner, Mrs. Glen O., 1462 S. Dollison St.
Upshaw, Mrs. Paul O., 2222 Englewood St.
Vail, Mrs. A. Denton, 1307 E. Catalpa St.
Wakeman, Mrs. Jasper Newton, 1402 E. Meadowmere St.
Walker, Mrs. William N., 1930 Arcadia Ave.
Webb, Mrs. Leslie Richard, 1647 E. Walnut St.
White, Mrs. R. New, 307 Cordova Court
Williams, Mrs. John Westyfield, 2245 Fritts St.
Wise, Mrs. Gordon F., 2850 Southern Hills Blvd.
Wittmer, Mrs. S. C., 2314 E. Washita St.
Wood, Mrs. William W., 1854 Berkley St.
Wooldridge, Mrs. Wilfred E., 1126 E. Stanford St.
Yancey, Mrs. Daniel L., 1133 S. Weller St.

JACKSON COUNTY
(Kansas City)

Aaron, Mrs. George, 612 W. 69th St. 13
Aisenstadt, Mrs. Albert E., 1204 W. 67th St. 13
Allebach, Mrs. Hobart K. B., 3810 W. 65th Ter., Shawnee Mission, Kan.
Allen, Mrs. Charles H., 616 W. Maple St., Independence
Allen, Mrs. Robert E., 2511 W. 64th St., Shawnee Mission, Kan.
Allen, Mrs. William B., 6416 Ensley Lane, Shawnee Mission, Kan.
Altomare, Mrs. Edward P., 2610 E. 63rd St.
Altringer, Mrs. Arthur N., 5630 Mission Dr., Prairie Village, Kan.
Anderson, Mrs. Raymond B., 6024 State Line, Shawnee Mission, Kan.
Anderson, Mrs. Richard W., 1001 Romany Rd. 13
Andrus, Mrs. Bailey C., 6508 Overbrook Rd., Shawnee Mission, Kan.
Arms, Mrs. Arnold V., 6421 High Dr., Prairie Village, Kan.
Aschmann, Mrs. T. H., 87th and Brooklyn
Asher, Mrs. A. Graham, 5410 State Line 12
Atcheson, Mrs. Bellefield, 5215 Sunset Dr. 12
Atwell, Mrs. Floyd C., 630 W. 60th Ter. 13
Ayers, Mrs. Samuel, 305 W. 51st Ter. 12
Bachman, Mrs. Paul L., 1206 W. Truman Rd., Independence
Baer, Mrs. Alvin J., 5800 Howe Dr., Mission, Kan.
Baker, Mrs. Philip J., 11440 E. 47th St. 33
Ballard, Mrs. V. B., 4408 W. 74th Ter., Prairie Village, Kan.
Bare, Mrs. Chester I., Jr., 11705 E. 51st St., Raytown 33
Barelli, Mrs. Pat A., 5609 Mission Dr., Shawnee Mission, Kan.
Barnard, Mrs. John L., 444 W. 67th St. 13
Barnes, Mrs. Robert H., 6714 Kenwood St. 10
Barnett, Mrs. Gordon P., 6568 High Dr., Shawnee Mission, Kan.
Barry, Mrs. John W., 217 W. 67th Ter. 13
Barry, Mrs. William, 4600 Nichols Pkwy. 12
Bay, Mrs. Merrill R., Woods Chapel Rd., Blue Springs
Becker, Mrs. R. R., 5622 Holmes St.
Bennett, Mrs. James D., 3216 W. 69th St., Prairie Village, Kan.
Benoit, Mrs. Hector W., Jr., 2501 W. 64th St., Shawnee Mission, Kan.
Berenson, Mrs. Sheldon, 832 W. 63rd St. 13
Bernreiter, Mrs. Michael, 1246 W. 63rd St. 13
Berry, Mrs. Maxwell G., 5020 Summit St. 13
Berry, Mrs. Neill, 1025 W. 62nd St. 13
Biggs, Mrs. Harry L., 9504 E. 63rd St., Raytown 33
Bikales, Mrs. Victor W., 5810 High Dr., Prairie Village, Kan.
Bills, Mrs. Marvin L., 3309 W. 68th St., Prairie Village, Kan.
Black, Mrs. Don A., 2700 W. 67th St., Prairie Village, Kan.
Blim, Mrs. Richard D., 3204 W. 71st St., Prairie Village, Kan.
Bohan, Mrs. Peter T., 420 E. Armour 9
Bolin, Mrs. N. V., 5720 Howe Dr., Mission, Kan.
Bordy, Mrs. Marvin D., 8710 Belleview St. 14
Borenstine, Mrs. Joseph, 7307 Holmes St. 10
Boughnou, Mrs. H. P., 600 W. 61st Ter. 13
Bourke, Mrs. Timothy S., 4535 Rockhill Ter. 10
Bowser, Mrs. John F., 3701 Madison St. 11
Brams, Mrs. Jack B., 5050 Oak St. 12
Braverman, Mrs. A. E., 611 E. 109th Ter. 31
Bridgens, Mrs. James G., 613 Red Rd., Independence
Brown, Mrs. Adrian J., 12 E. 63rd St., 13
Brown, Mrs. Irwin S., 3301 W. 68th St., Shawnee Mission, Kan.
Brown, Mrs. William R., 8124 Lee Blvd., Shawnee Mission, Kan.
Bruner, Mrs. Robert E., 912 Valentine Rd. 11
Brust, Mrs. Carl H., 6114 Howe Dr., Mission, Kan.
Buckner, Mrs. Robert C., 3507 W. 87th St., Shawnee Mission, Kan.
Budke, Mrs. Harold A., 1219 W. 66th Ter. 13
Buhler, Mrs. Victor B., 5212 Belleview St. 12
Buie, Mrs. Bruce R., 6905 E. 113th Ter. 34
Bunting, Mrs. Williston P., 1231 W. 62nd St. 13
Burns, Mrs. Robert R., 3508 W. 98th St., Overland Park, Kan.
Butcher, Mrs. Robert W., 1101 W. 86th Ter. 14
Byers, Mrs. Philip L., 5832 High Dr., Shawnee Mission, Kan.
Caffrey, Mrs. Raymond J., 1314 W. Red Bridge Rd. 10
Caldwell, Mrs. John K., 436 E. 65th Ter. 31
Calovich, Mrs. Emery R., 3500 W. 49th St., Shawnee Mission, Kan.
Campbell, Mrs. Frederick B., 1032 W. 55th St. 13
Campbell, Mrs. John G., 827 W. 60th Ter. 13
Carbaugh, Mrs. Glen C., 1234 Huntington Rd. 13
Carlson, Mrs. H. E., 2025 W. 48th Ter. 12
Carmichael, Mrs. Francis A.. 5750 Oakwood Rd., Prairie Village, Kan.
Carrier, Mrs. Edson C., 242 Plaza Med. Bldg.
Casady, Mrs. Gilbert N., 9830 Aberdeen Dr., Prairie Village, Kan.
Casford, Mrs. Ralph, 1236 W. 72nd St. 14
Castles, Mrs. John E., 620 Dartmouth Rd. 13

Chambers, Mrs. James Q., Jr., 5500 Belinder Rd., Shawnee Mission, Kan.
Chambers, Mrs. James Z., Sr., 3624 Holmes St. 9
Chapman, Mrs. Arthur H., 1020 W. 70th Ter. 13
Cheeseman, Mrs. William B., 5302 W. 79th Ter., Prairie Village, Kan.
Clark, Mrs. Irving H., R.R. 1, Grandview
Cochrane, Mrs. J. J., 9615 Grandview Rd.
Cockerell, Mrs. S. F., 3501 S. Chrysler, Independence
Coffey, Mrs. Ralph R., 814 Rockwell Lane 12
Cohen, Mrs. Harry K., 417 W. 70th St. 13
Cohen, Mrs. Hilliard, 1291 W. 72nd Ter. 14
Counsell, Mrs. C. M., 708 W. 17th St. 8
Cox, Mrs. Kenneth E., 5640 Pembroke Lane, Prairie Village, Kan.
Cramer, Mrs. Quentin, 3615 W. 83rd Ter., Prairie Village, Kan.
Cross, Mrs. Walter M., 4511 Holmes St. 10
Culbertson, Mrs. W. F., 1253 Huntington Rd. 13
Curran, Mrs. Desmond, 6626 Wenonga Ter., Prairie Village, Kan.
Curts, Mrs. Calvin J., 7419 Terrace St. 14
Dann, Mrs. David S., 1215 W. 67th St. 13
Davis, Mrs. Herbert V., 4601 Holmes St. 10
Davis, Mrs. Jack M., 4417 Blue Ridge Blvd. 33
Davis, Mrs. Robert C., 659 W. 61st Ter. 13
Day, Mrs. Cameron B., 2 E. 109 Ter. 14
Decker, Mrs. Albert I., 3000 W. 73rd St., Prairie Village, Kan.
DeMott, Mrs. John D., 4402 Homestead Dr., Prairie Village, Kan.
DeMotte, Mrs. John A., 1247 W. 56th 13
Dennie, Mrs. Charles C., 2600 Verona Rd., Shawnee Mission, Kan.
Dlabal, Mrs. L. J., 3729 Blue Ridge Blvd., Independence
Dodge, Mrs. Mark, 600 W. 58th St. 13
Dolezal, Mrs. J. B., 7928 Outlook, Prairie Village, Kan.
Dorsch, Mrs. Ervin H., 3516 Claremont St., Independence
Downey, Mrs. James W., 2400 W. 51st Ter., Shawnee Mission, Kan.
Drake, Mrs. Roy F., 6200 W. 62nd Ter., Mission, Kan.
Drisko, Mrs. Robert M., 2100 Stratford Rd., Shawnee Mission, Kan.
Duncan, Mrs. Ralph E., 1267 W. 61st St. 13
Duncan, Mrs. W. H., 501 Porte Cimi Pas 10
Duncan, Mrs. William H., Jr., 808 W. 69th St. 13
Durnell, Mrs. Monaford D., 1011 W. 1st St., Lee's Summit
Edmonds, Mrs. D. D., 9909 Mission Rd., Prairie Village, Kan.
Eisemann, Mrs. Gustave, 7908 Campbell St. 31
Elias, Mrs. David J., 10311 Sheley Rd., Independence
Elliott, Mrs. B. Landis, 4712 Roanoke Pkwy. 12
Elliott, Mrs. R. Glenn, 6136 Reinhardt Dr., Mission, Kan.
Elser, Mrs. Otto H., 604 Rankin Rd., Independence
Eshelman, Mrs. Albert D., 12116 E. 46th St. 33
Etzenhouser, Mrs. Merrill, 1215 W. 35th Ter., Independence
Etzenhouser, Mrs. Russell D., 1317 W. College St., Independence
Eubank, Mrs. Will R., 6113 Lane, Raytown 33
Farley, Mrs. Claude C., 5112 W. 69th Ter., Prairie Village, Kan.
Farney, Mrs. Jacob P., 5811 Blue Hills Rd. 10
Farnsworth, Mrs. J. J., 5608 Fairway, Shawnee Mission, Kan.
Feierabend, Mrs. Frank, 7345 Wyoming St. 14
Feist, Mrs. George V., 2400 Tomahawk Rd., Prairie Village, Kan.
Ferguson, Mrs. Eugene H., 2421 W. 63rd St., Shawnee Mission, Kan.
Ferguson, Mrs. James T., 718 E. Armour St. 9
Ferris, Mrs. Carl R., 629 W. 70th Ter. 13
Findley, Mrs. J. W., 14 W. 57th Ter. 13
Fitzgerald, Mrs. Robert H., 4761 Eastwood Dr. 29
Flanders, Mrs. Horace F., 3820 W. 65th Ter.
Flanders, Mrs. Virgil E., 5232 Birch St., Mission, Kan.
Folck, Mrs. William P., 5804 Linden Rd., Northwest, Parkville
Forman, Mrs. Louis H., 2801 W. 67th St., Shawnee Mission, Kan.
Forsythe, Mrs. Robert W., 6457 Verona Rd.
Foster, Mrs. Hal, 5050 Oak St.
Fowler, Mrs. Fred D., 4911 Pawnee Dr., Shawnee Mission, Kan.
Fowler, Mrs. James W., 7708 Brier Dr., Prairie Village 15, Kan.
Francisco, Mrs. Clarence B., 3621 Wyncote Lane, Shawnee Mission, Kan.
Fredeen, Mrs. Robert C., 5437 Canterbury Rd., Shawnee Mission, Kan.
Frick, Mrs. J. P., 116 Huntington Rd. 13
Fuhrman, Mrs. Donald L., 2708 W. 71st St., Prairie Village, Kan.
Fulton, Mrs. Albert, 7245 Terrace St. 14
Gainey, Mrs. Harold L., 6438 Indian Lane, Prairie Village, Kan.
Ganley, Mrs. W. Coyle, 8400 Overhill Dr. 38
Garrison, Mrs. Roy F., 404 W. 67th Ter. 13
Geha, Mrs. B. J., 627 E. 69th St. 31
Gempel, Mrs. Paul A., 5322 Falmouth Rd., Shawnee Mission, Kan.
Gestring, Mrs. Hugh, 3915 W. 90th Ter., Shawnee Mission, Kan.
Getelson, Mrs. Joseph, 4430 J. C. Nichols Pkwy. 11
Gibson, Mrs. David M., 5318 Sunset Dr. 12
Gillmor, Mrs. C. Stewart, 420 E. Armour St. 9
Ginsberg, Mrs. Norman A., 1220 W. 67th St. 13
Gist, Mrs. W. W., 1208 W. 59th St. 13
Goldman, Mrs. Max, 235 Ward Pkwy. 12
Goldman, Mrs. Stanley L., 5734 Windsor Dr., Mission, Kan.
Goldsich, Mrs. Edward, 5115 W. 81st St., Prairie Village, Kan.
Goodman, Mrs. Leroy, 2119 W. 70th Ter., Shawnee Mission, Kan.
Goodson, Mrs. W. H., Jr., 46 E. 54th St. 12
Goolsbee, Mrs. Robert, 4625 W. 61st Ter., Mission, Kan.
Gottsch, Mrs. Joseph C., 2701 W. 48th Ter., Shawnee Mission, Kan.
Grabske, Mrs. Charles F., 1314 W. Truman Rd., Independence
Graham, Mrs. Wallace H., 5157 Ward Pkwy. 12
Green, Mrs. John R., 3424 Norton St., Independence
Green, Mrs. Stanley, 1248 S. McCoy St., Independence
Greene, Mrs. W. Wallace, 2008 W. 68th St., Prairie Village, Kan.
Griffith, Mrs. George, 4010 Harrison St. 10
Griffith, Mrs. John A., Jr., 6500 Granada Dr., Shawnee Mission, Kan.
Growdon, Mrs. John A., 1207 Stratford Rd. 13
Gundle, Mrs. Sigmund, 5926 Windsor Dr., Shawnee Mission, Kan.
Haight, Mrs. John, 5609 Blue Ridge Blvd. 33
Hall, Mrs. Thomas B., 5632 Mission Rd., Shawnee Mission, Kan.
Halperin, Mrs. Philip, 1011 W. 56th St. 13
Hamel, Mrs. Herbert A., 6441 High Dr., Shawnee Mission, Kan.
Hamill, Mrs. Robert W., 6945 Nieman Rd., Shawnee Mission, Kan.
Hanna, Mrs. Minford A., 7427 Village Dr., Prairie Village, Kan.
Harless, Mrs. Morris S., 6844 Cherry St. 31
Hartwig, Mrs. Fred H., 5204 Pawnee Dr., Shawnee Mission, Kan.
Haynes, Mrs. Solon E., 5306 Holmes St. 10
Hazen, Mrs. Robert, 9919 Ensley Lane, Prairie Village, Kan.
Heller, Mrs. B. Marcus, 627 W. 68th Ter. 13
Helman, Mrs. Richard G., 6540 Wenonga Rd., Prairie Village, Kan.
Henry, Mrs. Clarke L., 6616 Wenonga Rd., Prairie Village, Kan.
Henry, Mrs. David S., Rt. 2, Quivira Lake, Kansas City 6, Kan.
Herrman, Mrs. George V., 828 Greenway Ter., 13
Hess, Mrs. H. Lewis, 750 W. 47th St. 12
Hess, Mrs. Paul D., 8423 High Dr., Prairie Village, Kan.
Hibbard, Mrs. Blaine Z., 5211 Sunset Dr. 12
Hickerson, Mrs. J. C., 1210 S. Main St., Independence
Hickerson, Mrs. W. H., 43rd and Chrysler Sts., Independence
Hill, Mrs. J. H., 8115 Meadow Lane, Shawnee Mission, Kan.
Hink, Mrs. Fred, 524 Hardy St. 22
Hodgson, Mrs. Frank H., 1049 W. 55th St.
Hoeper, Mrs. Sam, 13009 12th St., Grandview
Hoffman, Mrs. J. S., 5820 Cherokee Dr., Shawnee Mission, Kan.
Hoffmann, Mrs. R. Lee, 6533 Rainbow St., Prairie Village, Kan.
Holbrook, Mrs. Ralph W., 700 W. 48th St.
Hollweg, Mrs. Kenneth C., 808 W. Meyer Blvd. 13
Holman, Mrs. Melvin, 4815 W. 103rd St., Overland Park, Kan.
Holton, Mrs. E. B., 2817 Westport Rd., Independence
Hook, Mrs. Waller G., 9238 State Line, Prairie Village, Kan.
Howard, Mrs. Joseph W., 6026 McGee St. 13
Hungate, Mrs. Carroll P., 6845 Oak St., 13
Hunt, Mrs. Claude J., 615 W. 56th St. 13
Hunter, Mrs. Martin P., 450 W. Meyer Blvd. 13
Ingham, Mrs. Walton C., 9723 Overbrook Rd., Shawnee Mission, Kan.
Irwig, Mrs. Fred, 5109 W. 87th St., Overland Park, Kan.
Jackson, Mrs. Carl A., 2305 W. 79th St., Prairie Village, Kan.
Jackson, Mrs. Jabez N., 4600 Nichols Pkwy. 12
Jacob, Mrs. Walter P., 1002 Romany Rd. 13
Jacobs, Mrs. Morton, 6416 Verona Rd., Prairie Village, Kan.
Jacobs, Mrs. Walter, 6656 Milhaven Dr., Shawnee Mission, Kan.
James, Mrs. Otis E., 2810 W. 68th St. 15
Jarvis, Mrs. James A., 600 W. 57th St. 13
Jensen, Mrs. Robert, 440 E. 66th St. 10
Johns, Mrs. Leo E., 10217 Tracy St. 31
Johnson, Mrs. Joseph E., 8605 Sleepy Hollow Rd. 14
Jonas, Mrs. Harry S., 11711 Markham Rd., Independence
Jones, Mrs. T. Reid, 5927 Lockton Lane, Mission, Kan.
Justus, Mrs. John B., 5221 Howe Dr., Shawnee Mission, Kan.
Kantor, Mrs. Julius M., 6708 High Dr., Shawnee Mission, Kan.
Kantor, Mrs. Samuel, 209 Brush Creek 12
Kartus, Mrs. Irving, 2608 W. 67th St., Shawnee Mission, Kan.
Kaul, Mrs. Philip G., 5310 Mission Woods, Shawnee Mission, Kan.
Keairnes, Mrs. Harold W., 11205 E. 48th St.
Keeler, Mrs. James E., 651 W. 57th St. 13
Kells, Mrs. William A., 1408 Little St., Grandview
Kendall, Mrs. Charles A., 658 Red Rd., Independence
Kennard, Mrs. G. Keith, 6109 Buena Vista, Mission, Kan.
Kent, Mrs. Bela K., 5839 Cherokee St., Shawnee Mission, Kan.
Kepner, Mrs. John W., 3425 Holmes St. 9
Kerr, Mrs. Russell, 5938 Blue Hills Rd. 10
Ketcham, Mrs. W. M., 1205 W. 67th St. 13
Kettner, Mrs. Edward G., 6510 Milhave Dr., Mission, Kan.
Kienberger, Mrs. Paul A., 3711 Northern Blvd., Independence
Kiene, Mrs. Richard H., 5835 High Dr., Shawnee Mission, Kan.
Kimball, Mrs. Merritt H., 610 E. 36th St. 9
King, Mrs. J. Tenbrook, 8228 Linden Dr., Prairie Village, Kan.
Kitchen, Mrs. W. M., 1209 W. 58th St. 13
Klein, Mrs. Ed H., 7011 Roe Blvd., Prairie Village, Kan. 15
Knight, Mrs. John S., 5800 High Dr., Shawnee Mission, Kan.
Knight, Mrs. L. B., 108 Madison Lane, Lee's Summit
Koehler, Mrs. Charles A., 4834 Holly St. 12
Kohn, Mrs. Cecil M., 4618 Warwick St. 12
Korth, Mrs. William M., 6615 Overhill Rd., Prairie Village, Kan.
Kranson, Mrs. Seymour J., 11 Hawthorne Pl., Independence
Kyger, Mrs. Fred B., 637 W. 67th Ter. 13
Lally, Mrs. James J., 800 W. 52nd Ter. 12
Lamar, Mrs. Frederick C., 323 Brush Creek Blvd. 12
Lamar, Mrs. Robert F., 800 W. 53rd Ter. 12
Lapp, Mrs. Harry C., 5235 Rockhill Rd. 10

Latham, Mrs. Raymond, 3008 W. 67th St., Prairie Village, Kan.
Laughlin, Mrs. E. O., Chatham Hotel, 3701 Broadway 11
Layton, Mrs. Ira C., 1025 Greenway Ter. 13
Leifer, Mrs. William, 2001 W. 70th St., Prairie Village, Kan.
Leitch, Mrs. C. G., 808 S. 15th St., Blue Springs
Leitz, Mrs. Frank, 6832 Locust St. 10
Lemoine, Mrs. Albert, 9200 High Dr., Shawnee Mission, Kan.
Lentz, Mrs. Clark, 4945 Neosho St., Shawnee Mission, Kan.
Leo, Mrs. William, 7470 Village Dr., Prairie Village, Kan.
Lichtor, Mrs. Alexander, 5436 Neosho Ave., Shawnee Mission, Kan.
Lichtor, Mrs. Joseph, 2109 W. 70th St., Prairie Village, Kan.
Lieberman, Mrs. B. Albert, 424 W. 70th St. 13
Liersch, Mrs. Joseph, 815 E. Gregory Blvd. 31
Lilly, Mrs. Terry E., Jr., 6515 Belinder St., Shawnee Mission, Kan.
Link, Mrs. Vance E., 1201 W. 36th St., Independence
Long, Mrs. R. S., 3343 Blue Ridge Blvd., Independence
Lowell, Mrs. Paul, 712 W. 46th St. 12
Lyddon, Mrs. H. R., 1221 W. 67th St. 13
Lytton, Mrs. George J., 3408 W. 79th St., Prairie Village, Kan.
McCanse, Mrs. Raymond A., 411 W. 50th St. 12
McClanahan, Mrs. Robert C., 6456 Overbrook Rd., Prairie Village, Kan.
McConchie, Mrs. James E., 2719 W. Chrysler, Independence
McCoy, Mrs. Fred, 5720 Foster St., Shawnee Mission, Wan.
McCubbin, Mrs. C. Roy, 53 Janssen Pl. 9
McCunniff, Mrs. William B., 3719 Jarboe St. 11
McDonald, Mrs. Victor G., Jr., 8817 Aberdeen Rd., Shawnee Mission, Kan.
McDonnell, Mrs. John F., 5411 Central St. 13
McGannon, Mrs. Paul T., 5311 Chadwick St., Shawnee Mission, Kan.
McGuire, Mrs. Thomas H., 5426 Sherwood Dr., Mission, Kan.
McHale, Mrs. Thomas, 3003 W. 90th Ter., Shawnee Mission, Kan.
McKee, Mrs. Joseph W., R.F.D. 1, Stillwell, Kan.
McKee, Mrs. Wallace P., 3415 W. 74th Ter., Prairie Village, Kan.
McLeod, Mrs. John, 9 E. 67th St. 13
McMillan, Mrs. Thomas E., 3409 W. 69th St., Shawnee Mission, Kan.
McVay, Mrs. James R., 856 W. 62nd St. 13
McVay, Mrs. James R., Jr., 1015 Huntington Rd. 13
MacNaughton, Mrs. Robert, 3208 W. 101st St., Shawnee Mission, Kan.
Major, Mrs. Hermon S., 3100 Euclid St. 9
Mangels, Mrs. Kenneth A., 1103 W. 36th Ter., Independence
Mantz, Mrs. Herbert L., 1209 Romany Rd. 13
Marks, Mrs. Mark M., 6537 Summit St. 13
Marshall, Mrs. C. F., 2500 W. 65th St., Shawnee Mission, Kan.
May, Mrs. James W., 3501 W. 63rd St., Prairie Village, Kan.
Mayer, Mrs. John H., Jr., 829 W. 55th St. 13
Melgaard, Mrs. S. Ross, 6831 Cherry St. 31
Meyer, Mrs. Paul W., 31 E. 68th Ter.
Meyers, Mrs. Harold L., 5925 Cherokee Dr., Mission, Kan.
Miles, Mrs. George O., 2231 W. 63rd St., Shawnee Mission, Kan.
Miller, Mrs. Clint L., 201 Madison St., Lee's Summit
Miller, Mrs. Gerald L., 836 W. 51st St. 12
Miller, Mrs. Max I., 4001 W. 66th St., Prairie Village, Kan.
Miller, Mrs. Wade H., 16 E. 54th St. 12
Miller, Mrs. Wilson, 6400 Verona St., Shawnee Mission, Kan.
Mixson, Mrs. William C., 6501 Sagamore Rd., Shawnee Mission, Kan.
Mooney, Mrs. Justin L., 5717 Windsor Rd., Shawnee Mission, Kan.
Mooney, Mrs. Marcel L.. 6439 Ensley Lane, Shawnee Mission, Kan.
Morgan, Mrs. David B., 6513 Jefferson St. 13
Moriarty, Mrs. Lauren R., 1239 W. 61st Ter. 13
Morrow, Mrs. Raymond L., 17 W. 69th St. 13
Moss, Mrs. Paul, 420 E. 64th Ter. 31
Mosser, Mrs. Robert S., 3114 S. Norton St., Independence
Mueller, Mrs. M. J., 6441 Holmes St. 31
Mullen, Mrs. Leo M., 4443 Paseo Blvd. 10
Murphy, Mrs. Edward S., 836 W. 62nd St. 13
Murphy, Mrs. Robert J., 6428 High Dr., Shawnee Mission, Kan.
Myers, Mrs. John S., 5401 W. 65th Pl., Shawnee Mission, Kan.
Myers, Mrs. Robert M., 804 W. 65th St. 13
Myers, Mrs. Wilson, 425 Huntington Rd. 13
Needels, Mrs. Orval T., 207 W. 67th Ter. 13
Nelson, Mrs. Bentley A., 6842 Cherry St. 31
Nesselrode, Mrs. John H., 3510 S. McCoy St., Independence
Nickson, Mrs. Charles, 4425 Larson St. 33
Nicolay, Mrs. Kenneth S., 4049 Brookridge Dr., Shawnee Mission, Kan.
Nigro, Mrs. E. Robert, 834 W. 61st Ter. 13
Noltensmeyer, Mrs. Milton, 3305 W. 50th Ter., Shawnee Mission, Kan.
Nunn, Mrs. P. M., 3418 Karnes Blvd. 11
O'Brien, Mrs. Leo A., 5401 Wyandotte St. 12
O'Hearne, Mrs. John J., 5529 High Dr., Prairie Village, Kan.
O'Neil, Mrs. James H., 6729 Rockhill Rd., 31
Overesch. Mrs. Harry B., 6215 Ensley Lane, Shawnee Mission, Kan.
Owens, Mrs. Graham, 3700 W. 64th St.
Ozar, Mrs. Milton, 109 E. Dartmouth Rd. 13
Padfield, Mrs. Earl G., 1906 W. 61st Ter., Prairie Village, Kan.
Padgett, Mrs. Earl C., 6501 Jefferson St. 13
Pakula, Mrs. Sidney F., 5225 Charlotte St. 10
Pallett, Mrs. Harold A., 4618 Warwick St.
Parker, Mrs. Hubert M., 1200 W. Red Bridge Rd. 14
Passman, Mrs. Harold, 416 E. 72nd. Ter. 31
Patterson, Mrs. John R., 5317 Chadwick, Shawnee Mission, Kan.
Pearson, Mrs. Paul, 5820 Howe Dr., Shawnee Mission, Kan.
Peete, Mrs. Don Carlos, 3717 Belleview St. 11
Perll, Mrs. Maurice F., 630 W. 61st Ter. 13
Perry, Mrs. Ralph, 7140 Sni-A-Bar Rd. 29
Peterson, Mrs. Milton C., 3000 W. 67th St., Prairie Village, Kan.
Petry, Mrs. E. L., 4934 Belinder Rd., Shawnee Mission, Kan.
Pfuetze, Mrs. Edwin, 3105 W. 71st St., Prairie Village, Kan.
Pinskter, Mrs. O. T., 6541 Granada Lane, Prairie Village, Kan.
Piper, Mrs. Donald K., 3301 E. Meyer Blvd. 30
Pipkin, Mrs. Garrett, 5427 Baltimore St. 12
Pollock, Mrs. Leo H., 5235 Rockhill Rd. 10
Porter, Mrs. Louis, 6017 McGee St. 13
Powers, Mrs. John M., 3838 Blue Ridge Blvd., Independence
Preston, Mrs. Albert, 606 W. Meyer Blvd. 13
Printz, Mrs. Joseph H., 820 W. 64th Ter. 13
Pugh, Mrs. Richard G., 600 Dickinson Rd., Independence
Quer, Mrs. Erich A., 6820 Tomahawk Rd., Shawnee Mission, Kan.
Quistgard, Mrs. P. C., 7300 Manchester 33
Ramey, Mrs. Ehret O., 8907 Belleview St.
Rector, Mrs. Joe Lee, 5323 Fairway Rd., Shawnee Mission, Kan.
Reinhardt, Mrs. G. Robert, 600 E. 66th St. 10
Rhoades, Mrs. Arthur, 111th & Antioch Rd., Box 305. Lenexa
Richert, Mrs. Robert C., 504 W. 96th St. 14
Riller, Mrs. L. E., 3724 Holmes St. 9
Roberts, Mrs. Harold M., 1005 Brentwood Circle 12
Roberts, Mrs. Sam E., 5964 Overhill Rd., Shawnee Mission, Kan.
Robinson, Mrs. Arthur W., 6600 Wenonga Rd., Shawnee Mission, Kan.
Robinson, Mrs. Ernest Kip, 1015 W. 58th Ter. 13
Robinson, Mrs. G. Wilse, 2625 W. Paseo 8
Robinson, Mrs. G. Wilse, Jr., Lake Quivira, Kansas City 6, Kan.
Robinson, Mrs. William J., 9931 Lee Circle, Shawnee Mission, Kan.
Robison, Mrs. James Travis, Jr., 600 W. Dartmouth Rd. 13
Rubin, Mrs. Sidney, 1287 W. 72nd St. 14
Rubnitz, Mrs. Leon H., 210 W. 94th St. 14
Russell, Mrs. James L., 1016 W. 41 Pl. 11
Saferstein, Mrs. A. Lester, 6859 Cherry St. 31
Samuelson, Mrs. E. A., 1000 W. Gregory Blvd. 14
Sanders, Mrs. Clarence E., 4700 Roanoke Pkwy. 12
Sanders, Mrs. William F., 6419 Wornall Ter. 13
Sauer, Mrs. Gordon, 5536 Central St. 13
Saunders, Mrs. Everett L., 3839 Chrysler St., Independence
Schaerrer, Mrs. W. C., 5245 Mercier St. 12
Schiffmacher, Mrs. Jack E., 4517 W. 65th St., Prairie Village, Kan.
Schorer, Mrs. Edwin, The Walnuts 12
Schottman, Mrs. Gerhard W., Jr., 5902 W. 77th Ter., Prairie Village, Kan.
Schutz, Mrs. Richard B., 3913 W. 57th Ter., Shawnee Mission, Kan.
Seely, Mrs. Clark W., 3000 W. 68th St., Shawnee Mission, Kan.
Shapiro, Mrs. L. M., 6429 Holmes St. 31
Shechter, Mrs. Nathan, 5723 Windsor Dr., Shawnee Mission, Kan.
Sheldon, Mrs. Russell D., 816 W. 58th Ter. 13
Shifrin, Mrs. Alexander, 6824 Holmes St. 31
Shireman, Mrs. Kenneth L., 4415 Sunrise Dr. 23
Shuey, Mrs. Herbert, 933 E. 77th Ter. 31
Shumate, Mrs. D. L., 3703 Penn St. 11
Shypper, Mrs. M. J., 4738 Oak St. 12
Simon, Mrs. Sanford, 5000 Oak, Twin Oaks North 12
Sinclair, Mrs. Alexander B., Jr., 211 W. Concord St. 2
Singleton, Mrs. J. Milton, 835 W. 53rd St. Ter. 12
Skillman, Mrs. Robert K., 10335 High Dr., Shawnee Mission, Kan.
Skinner, Mrs. John O., 5108 Grand St. 12
Skinner, Mrs. John T., 824 Westover Rd. 13
Slentz, Mrs. Edwin, 4812 W. 66th Ter., Shawnee Mission, Kan.
Slentz, Mrs. William A., 441 W. 59th Ter. 13
Slickman, Mrs. Robert A., 4937 Wyoming St. 12
Smith, Mrs. Arthur B., 101st St. & Holmes Rd. 31
Smith, Mrs. Dale C., 5212 Reinhardt St., Shawnee Mission, Kan.
Smith, Mrs. Ira T., 3900 W. 90th Ter., Shawnee Mission, Kan.
Smull, Mrs. Ned W., 5321 Falmouth St., Shawnee Mission, Kan.
Sneid, Mrs. Philip, 4201 W. 90th Ter., Shawnee Mission, Kan.
Snider, Mrs. Sam H., 722 Ward Pkwy. 12
Spafford, Mrs. Allen L., 5552 Belinder Ave., Shawnee Mission, Kan.
Spurny, Mrs. Otto M., 10 E. 68th Ter.
Stacey, Mrs. Wallace R., 2624 S. Arlington St., Independence
Staggs, Mrs. William A., 641 E. 45th St. 10
Staley, Mrs. Harry R., 5028 Sunset Dr. 12
Statland, Mrs. Harry, 1016 W. 69th Ter. 13
Stelle, Mrs. C. W., 7549 Wyoming St.
Steffen, Mrs. L. F., 5521 Crestwood Dr. 10
Stelmach, Mrs. Jack W., 6100 Morningside Dr. 13
Stockton, Mrs. Raymond W., 5215 W. 81st St., Prairie Village, Kan.
Stockwell, Mrs. A. Lloyd, 5736 Windsor Dr., Shawnee Mission, Kan.
Stratemeier, Mrs. Edward H., 9728 High Dr., Shawnee Mission, Kan.
Summers, Mrs. Caldwell B., 7312 Jarboe St. 14
Swisher, Mrs. Robert C., 6034 Lockton Lane, Shawnee Mission, Kan.
Szabados, Mrs. Ernest D., 1901 Leslie St., Independence
Tarson, Mrs. Solomon S., 837 W. Gregory Blvd. 14
Tasker, Mrs. Charles B., 2721 W. 67th Ter., Prairie Village, Kan.
Terrill, Mrs. Robert S., 10223 Lee Blvd., Leawood, Kan.

Theel, Mrs. Otto, 5911 Howe Dr., Mission, Kan.
Thiele, Mrs. Geo. H., 6526 High Dr., Shawnee Mission, Kan.
Thiessen, Mrs. Edward H., 6405 Sagamore Rd., Shawnee Mission, Kan.
Thomas, Mrs. Christopher Y., 4206 Homestead Dr., Prairie Village, Kan.
Thompson, Mrs. Charles L., 1256 W. 61st Ter. 13
Thorn, Mrs. Druery, 8200 Ensley Lane, Leawood, Kan.
Tice, Mrs. Wayne K., 1915 Lake Dr., Independence
Trimble, Mrs. William K., 6020 McGee St. 13
Trippe, Mrs. Harrison C., 8511 Lee Blvd., Shawnee Mission, Kan.
Trowbridge, Mrs. E. Hayden, Jr., 6436 High Dr., Shawnee Mission, Kan.
Tutera, Mrs. Dominic F., 9801 E. 59th St. Ter.
Twin, Mrs. Edward J., 2921 W. 67th Ter., Prairie Village, Kan.
Twyman, Mrs. Richard A., 1020 W. 56th St. 13
Underwood, Mrs. Dick H., 2008 W. 95th St., Shawnee Mission, Kan.
Underwood, Mrs. Ross H., 5522 Aberdeen Rd., Shawnee Mission, Kan.
Unger, Mrs. Harold, 400 W. 68th St. 13
Valentine, Mrs. Herbert S., 1020 W. 69th St. 13
VanBiber, Mrs. James T., 3705 Northern Blvd., Independence
VanBuskirk. Mrs. William C., 1909 W. 67th St., Shawnee Mission, Kan.
Vaughn, Mrs. James W., 2804 W. 77th St., Prairie Village, Kan.
VanDel, Mrs. Dwight T., 6737 Rockhill Rd. 31
Vilmer, Mrs. Charles, 3016 W. 67th St., Shawnee Mission, Kan.
Vincent, Mrs. Jack C., 2003 W. 67th Ter., Prairie Village, Kan.
Virden, Mrs. Herbert H., 6533 High Dr., Shawnee Mission, Kan.
Voth, Mrs. Harold W., 5413 Neosho St., Shawnee Mission, Kan.
Wade, Mrs. Frederick E., 6421 Wornall Ter. 13
Walker, Mrs. Orville C., Jr., 2732 S. Chrysler St., Independence
Wakefield, Mrs. Franklin H., 8352 Overbrook Rd., Shawnee Mission, Kan.
Walker, Mrs. James C., 609 E. 96th St. 31
Walker, Mrs. John W., 8320 Ensley Lane, Shawnee Mission, Kan.
Wall, Mrs. Harry C., 6000 Howe Dr., Mission, Kan.
Wall, Mrs. Leonard A., 5011 Neosho Ave., Shawnee Mission, Kan.
Walthall, Mrs. Damon O., 6439 Jefferson St. 13
Webster, Mrs. Joseph G., 5532 Locust St. 10
Weiford, Mrs. Edward C., 2009 W. 68th St., Shawnee Mission, Kan.
Welker, Mrs. Joseph E., 6441 Summit St. 13
Wheeler, Mrs. Charles, Jr., 820 W. 57th St. 13
Wheeler, Mrs. John H., 5650 Mission Dr., Shawnee Mission, Kan.
White, Mrs. Charles H., 6518 Overhill Rd., Prairie Village, Kan.
White, Mrs. Stoughton F., 6815 Cherokee Lane, Prairie Village, Kan.
White, Mrs. William E., 613 W. 57th Ter. 13
Whiteman, Mrs. John R., 9739 Cherokee Lane, Shawnee Mission, Kan.
Whitman, Mrs. Doyle C., 6836 Cherokee Lane, Shawnee Mission, Kan.
Whitmore, Mrs. J. Stewart, 1039 W. 58th St. 13
Wien, Mrs. Irving A., 515 E. 78th St. 31
Wilhelm, Mrs. Francis E., 5331 Norwood Rd., Shawnee Mission, Kan.
Wilhelm, Mrs. Warren F., 3100 W. 67th St., Shawnee Mission, Kan.
Wilkinson, Mrs. E. A., 2300 W. 69th St., Shawnee Mission, Kan.
Williams, Mrs. Delon A., 1252 Stratford Rd. 13
Williams, Mrs. Joseph C., Jr., 1231 W. 69th St. 13
Williams, Mrs. Roland Dean, 5320 Norwood St., Shawnee Mission, Kan.
Williams, Mrs. Vincent T., 4400 Blue Ridge Blvd., 33
Willits, Mrs. Lyle G., 1224 W. 62nd St. 13
Willoughby, Mrs. J. B., 1019 W. 69th Ter. 13
Wilson, Mrs. Brickhouse, 700 Ward Pkwy. 12
Wilson, Mrs. Clifford C., 5531 Neosho Lane, Shawnee Mission, Kan.
Winer, Mrs. Herbert J., 8136 Rosewood Dr., Prairie Village, Kan.
Winston, Mrs. Bernard H., 1006 W. 67th St. 13
Wise, Mrs. Geo. W., 4610 Homestead Dr., Prairie Village, Kan.
Wolf, Mrs. Jack, 6125 Morningside Dr. 13
Wood, Mrs. Lawrence E., 8446 Mission Rd., Prairie Village, Kan.
Woodward, Mrs. W. W., 12914 E. 39th Ter., Independence
Wortman, Mrs. Robert F., 2819 W. 66th Ter., Shawnee Mission, Kan.
Wright, Mrs. R. Paul, 4902 Belinder Ave., Shawnee Mission, Kan.
Wu, Mrs. William, 4414 Homestead Dr., Prairie Village, Kan.
Young, Mrs. James E., 9817 Lee Circle, Leawood
Zellermayer, Mrs. Jack, 5801 Lockton Lane, Shawnee Mission, Kan.
Ziegler, Mrs. A. M., 8201 Tomahawk Ave., Shawnee Mission, Kan.
Ziegler, Mrs. Dewey K., 8347 Delmar Lane, Prairie Village, Kan.
Zoglin, Mrs. Nathan, 5901 Wyandotte St. 13

JASPER COUNTY
(Joplin)

Allen, Mrs. David O., 505 W. 34th St.
Barnett, Mrs. Norman, Rt. 3, Box 190-H, Tabor Woods
Birsner, Mrs. Frank, 1717 River St., Carthage
Black, Mrs. Mervin H., 615 Hampton Pl.
Blanke, Mrs. Otto E., 2505 E. 14th St.
Burch, Mrs. John E., 1345 Crest St.
Chenoweth, Mrs. Albert, 320 Moffet St.
Chesney, Mrs. George W., 2416 E. 12th St.
Cohle, Mrs. Richard, 1609 Lilac Lane, Carthage
Craig, Mrs. Irwin T., 2525 E. 12th St.
Crawford, Mrs. A. L., 2931 Pearl St.
Crispell, Mrs. Lawrence S., 911 Kinsington St.
Curl, Mrs. Howard, 102 Moffet St.
DeTar, Mrs. B. E., Jr., Rt. 3, Box 192-A, Tabor Woods
DeTar, Mrs. B. E., Sr., Duquesne Rd.
DeTar, Mrs. George, 2718 Connor St.
Ferguson, Mrs. Lewis H., 3102 Minnesota St.
Ferguson, Mrs. Ralph L., 420 E. 33rd St.
Graves, Mrs. F. Burton, Rt. 4, Box 491
Hamilton, Mrs. Eugene H., 615 N. Pearl St.
Holtzman, Mrs. Samuel, 108 Sergeant St.
Hornback, Mrs. Edward R., 2609 E. 12th St.
Hurst, Mrs. W. W., 2502 E. 13th St.
Isbell, Mrs. C. H., 1046 S. Garrison St., Carthage
Jeans, Mrs. Virgil, 629 Islington St.
Kenney, Mrs. V. E., 728 Chestnut St.
Kirschman, Mrs. R. E., Rt. 4, Box 359
Koehler, Mrs. John W., 3010 Wall St.
Longenecker, Mrs. Joe L., 710 N. Jackson St.
McIntire, Mrs. Emery, 1803 S. Maple St., Carthage
McNew, Mrs. W. T., 1204 S. Main St., Carthage
McPike, Mrs. Lloyd H., 3317 Oak Ridge Dr.
Maddox, Mrs. John D., 1336 Crest St.
Meares, Mrs. Cecil H., Rt. 4, Box 497
Myers, Mrs. Roy H., 623 Sergeant St.
Paddock, Mrs. Charles S., Mayflower Apts.
Papp, Mrs. Sandor D., 3343 Pearl St.
Patterson, Mrs. Donald R., Holly Hill
Patterson, Mrs. Grover S., 1944 S. Main St., Carthage
Post, Mrs. Winfred L., 2630 E. 15th St.
Reid, Mrs. Charles T., 614 Hampton St.
Schoeberl, Mrs. C. B., 3111 E. 4th St.
Schulte, Mrs. Gregory A., 2515 E. 12th St.
Scorse, Mrs. Sidney W., 619 W. 2nd St.
Smith, Mrs. Roland T., 426 N. Pearl St.
Smith, Mrs. Russell W., 315 Euclid St., Carthage
Stormont, Mrs. R. M., 26 S. Webb St., Webb City
Walker, Mrs. Paul W., 1022 N. Sergeant St.
Wetzel, Mrs. Fred S., 1503 S. Garrison St., Carthage
Wieman, Mrs. Harry K., 536 N. Wall St.
Wood, Mrs. George H., 530 E. Highland St., Carthage
Wooldridge, Mrs. Bart F., 1435 Crestwood St.
Wright, Mrs. George W., 222 S. Webb St., Webb City
Young, Mrs. Clyde C., 2518 Markwardt St.

JEFFERSON COUNTY

Allbee, Mrs. Roger, Crystal City
Bolgar, Mrs. Bertalan, Festus
Donnell, Mrs. Harold, Crystal City
Donnell, Mrs. Thomas, De Soto
Fallet, Mrs. Charles, De Soto
Judge, Mrs. Thomas, Crystal City
Kozal, Mrs. Frank, Crystal City
McKinstry, Mrs. Karl, De Soto
Mayfield, Mrs. Logan, Crystal City
Rutledge, Mrs. John, Crystal City
Senn, Mrs. Emmett, Herculaneum

JOHNSON COUNTY
(Warrensburg)

Cooper, Mrs. R. Lee, 411 W. Gay St.
Damron, Mrs. Oscar H., 612 N. Maguire St.
Gonzalez, Mrs. Mario Garza, 204 Grover St.
Harkness, Mrs. Harry H., Burkarth Rd.
Johnson, Mrs. Charles S., 821 S. Maguire St.
Jones, Mrs. Keith D., 910 E. Clark St.
Lederer, Mrs. Charles M., 617 Clark St.
Maxson, Mrs. T. Reed, Arilen Acres

LAFAYETTE-RAY COUNTIES

Best, Mrs. Robert, Higginsville
Brady, Mrs. Hugh, Concordia
Brasher, Mrs. Ben H., Lexington
Cook, Mrs. Edna, Richmond
Cook, Mrs. Thomas B., Richmond
Cope, Mrs. Joseph S., Lexington
Crozier, Mrs. Frank, Richmond
Devault, Mrs. George, Richmond
Fulkerson, Mrs. Wilbur E., Higginsville
Johnston, Mrs. E. L., Concordia
Kelling, Mrs. Douglas, Waverly
Kelling, Mrs. George, Waverly
Kelling, Mrs. Jordan, Waverly
Koppenbrink, Mrs. W. E., Jr., Higginsville
Koppenbrink, Mrs. W. E., Sr., Higginsville
Liston, Mrs. Odus, Oak Grove
Martin, Mrs. Wilfred E., Odessa
Riley, Mrs. Charles T., Richmond
Riley, Mrs. Ralph, Lexington
Ward, Mrs. W. Joe, Lexington
Williams, Mrs. John W., Oak Grove

MARION COUNTY
(Hannibal)

Bach, Mrs. Lysle M., 1737 Harrison Hill
Burns, Mrs. Francis R., 2903 Hill St.
Canella, Mrs. John, 3254 St. Mary's Ave.
Fischer, Mrs. Thomas J., 2912 W. Bird St.
Foreman, Mrs. Phillip B., 3342 W. Ely Rd.
Francka, Mrs. W. F., 603 Country Club Dr.
Glascock, Mrs. Donald, Palmyra
Greene, Mrs. Harry, 1911 Harrison Hill
Hamlin, Mrs. Wyeth, 3405 St. Mary's Ave.
Landau, Mrs. Daniel B., 2901 Pleasant St.
Lanning, Mrs. Robert J., 7 Cardiff Lane
Latimer, Mrs. Walter N. A., 3302 Marsh Ave.
Lucke, Mrs. E. M., 2601 Hubbard St.
Nigh, Mrs. Charles A., 16 Ridgewood St.
Purcell, Mrs. Paul, Hull, Illinois
Rapp, Mrs. Lamoine, 19 Holliday St.
Roller, Mrs. Merrill J., 1000 Country Club Dr.
Smith, Mrs. William J., 3101 St. Mary's Ave.
Steele, Mrs. James, 1021 Hill St.
Strong, Mrs. Richard M., 313 Virginia St.
Sultzman, Mrs. Francis E., 1 Cardiff Lane
Sweets, Mrs. Henry H., Jr., 207 N. 6th St.
Walterscheid, Mrs. John H., 12 Riverpoint Rd.
Well, Mrs. Julius W., Palmyra

MEMBERS-AT-LARGE

Barnett, Mrs. Charles H., 123 E. Locust St., Bolivar
Bareis, Mrs. Robert, 408 N. Locust St., Marshfield
Biggs, Mrs. Fred J., Jr., 808 N. Main St., Poplar Bluff

Blackwell, Mrs. Charles W., 1700 S. 4th St., Platte City
Bloom, Mrs. W. A., 200 Howard St., Fayette
Brenner, Mrs. Paul A., 108 W. Washington St., Owensville
Brock, Mrs. Bernard, Windsor
Campbell, Mrs. James Edwin, 623 Sunset Dr., Macon
Carrington, Mrs. Howard W., 105 Bennett St., Lebanon
Crider, Mrs. A. J., Dixon
Davis, Mrs. Landis Y., Canton
Denny, Mrs. Hubert M., 610 State St., Union
Eggleston, Mrs. Donald E., 410 N. Rutherford St., Macon
Fleming, Mrs. Jacob W., Jr., 1 Windsor Pl., Moberly
Fleming, Mrs. Thomas S., 517 Fort St., Moberly
Garrison, Mrs. T. W., Box 43, Camdenton
Heeb, Mrs. Max A., 800 Allen Blvd., Sikeston
Hoelscher, Mrs. Harold F., Hickory Haven, Warrenton
Long, Mrs. David S., Lake Lotawana M40, Lee's Summit
McCraw, Mrs. Doyle C., 711 N. Main St., Bolivar
McNeel, Mrs. Lee A., Jr., Valley View Angus Farms, Greenfield
Muench, Mrs. Ludwig O., 1530 Riverview Dr., Washington
Netherton, Mrs. George F., 312 E. 3rd St., Cameron
Parker, Mrs. H. Graham, Platte City
Post, Mrs. John P., Grand Ave., Washington
Powers, Mrs. John A., 315 N. Pine St., Harrison, Ark.
Richardson, Mrs. William R., Union
Rinker, Mrs. Carl T., Jr., 322 Duff St., Macon
Ritterbusch, Mrs. James K., State Hospital No. 1, Fulton
Rowlette, Mrs. Avery P., 4 Fair Oaks, Moberly
Schmidt, Mrs. Herbert H., Marthasville
Shaw, Mrs. Carvel T., Hermann
Shaw, Mrs. William J., 700 W. Davis St., Fayette
Smith, Mrs. William J., 206 Phelps St., Windsor
Strehlman, Mrs. Benjamin G., 510 W. End Ave., Union
Summers, Mrs. Jacob H., Knight Bldg., Lebanon
Szymanski, Mrs. Stanley R., 731 Fisk Ave., Moberly
Thurber, Mrs. Claude M., Windsor
Urban, Mrs. Edgar D., Sikeston

MILLER-MORGAN-MONITEAU COUNTIES

Buehler, Mrs. Carl T., Jr., Eldon
Burke, Mrs. J. P., California
Fulks, Mrs. Richard B., California
Gallagher, Mrs. Lionel M., California
Gunn, Mrs. Jack Versailles
Kibbe, Mrs. E. A., California
Latham, Mrs. Kenyon, California
Lyle, Mrs. Ray, Versailles
Shelton, Mrs. E. O., Eldon
Washburn, Mrs. J. L., Versailles

MINERAL AREA
(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Mrs. Charles H., 706 W. Main St., Flat River
Appleberry, Mrs. Reuben, 815 W. Columbia St., Farmington
Brennan, Mrs. John A., 2 Hoctor Dr., Farmington
Bull, Mrs. Ben, 109 S. Knob St., Ironton
Carleton, Mrs. Charles E., Jr., 501 Center St., Farmington
Chastain, Mrs. C. W., 30 Tanglewood, Farmington
Cresswell, Mrs. George F., Potosi
Crouch, Mrs. Richard F., 714 Ste. Genevieve, Farmington
Dennis, Mrs. Paul, 709 Tyler St., Flat River
Evans, Mrs. Albert L., 113 Benham St., Bonne Terre
Foster, Mrs. Jack L., Desloge
Grossman, Mrs. Marvin, 500 Marshall St., Fredericktown
Haw, Mrs. Marvin T., Jr., 207 Fite St., Bonne Terre
Huckstep, Mrs. Robert A., 43 Pine St., Farmington
Hunt, Mrs. John W., Jr., 110 Bell St., Leadwood
Karraker, Mrs. Alvan G., 507 North St., Farmington
Mullen, Mrs. Jack, Route 2, Bonne Terre
Oliver, Mrs. George, 117 Oak Hill Downs, Farmington
Taylor, Mrs. Van W., 54 Church St., Bonne Terre
Watkins, Mrs. George L., Jr., 812 Dewey St., Farmington
Watkins, Mrs. G. L., 813 Dewey St., Farmington
Yeargain, Mrs. John P., Irondale

NODAWAY-HOLT-ATCHISON-GENTRY-WORTH COUNTIES

Bare, Mrs. E. F., Tarkio
Bauman, Mrs. Henry C., 921 W. 3rd St., Maryville
Byland, Mrs. Ben, R.F.D., Maryville
Carlin, Mrs. Albert, Stanberry
Carpenter, Mrs. Wallace, Rockport
Dunshee, Mrs. Robert E., 145 N. Sunset Dr., Maryville
Kirk, Mrs. C. W., Hopkins
Wempe, Mrs. G. R., 940 W. 2nd St., Maryville

OZARK
(Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald Counties)

Anderson, Mrs. Paul B., 246 Hillcrest, Neosho
Bailey, Mrs. Alan, State Sanitarium, Mount Vernon
Blankenship, Mrs. George W., Box 449, R. R. 3, Neosho
Bowman, Mrs. M. C., Highway 71 South, Neosho
Brasher, Mrs. Charles A., State Sanitarium, Mount Vernon
Brown, Mrs. Frederick B., Aurora
Carter, Mrs. James R., 718 Oakridge Dr., Neosho
Donley, Mrs. Robert R., 617 W. Cleveland St., Monett
Edwards, Mrs. Francis L., 510 Grand Ave., Monett
Glass, Mrs. William J., 402 Grand Ave., Monett
Glover, Mrs. Kenneth, 801 S. Market St., Mount Vernon
Hobbs, Mrs. George H., Mount Vernon
Kenney, Mrs. Roy Evans, R. R. 4, Neosho
Kerr, Mrs. Frank T., 511 W. Cleveland St., Monett
Langeluttig, Mrs. H. V., 529 Kirby St., Mount Vernon
Lentz, Mrs. H. C., 605 Highland Pl., Neosho
McCallum, Mrs. A. J. C., 404 Lincoln St., Aurora
Maples, Mrs. Floyd H., State Sanitarium, Mount Vernon
Olive, Mrs. George C., 514 W. Hickory St., Neosho
Price, Mrs. Charles H., Cassville
Royce, Mrs. J. J., Noel
Taylor, Mrs. L. T., Highway 71 South, Neosho
Whitehead, Mrs. Frank F., Box 270, Neosho
Wommack, Mrs. Fred L., Crane
Yates, Mrs. J. Lewis, State Sanitarium, Mount Vernon

PERRY COUNTY
(Perryville)

Blaylock, Mrs. G. A., 308 W. Ste. Maries
Carron, Mrs. O. A., 208 N. Waters St.
DeGenova, Mrs. G. H., 1280 Ridgeway Dr., Ste. Genevieve
Fairchild, Mrs. J. F., 36 S. Moulton St.
Fischer, Mrs. Theodore, Altenburg
Feltz, Mrs. L. W., 20 S. Feltz St.
Legner, Mrs. Stanley G., 201 State St.
Lutkewitte, Mrs. J. F., 33 St. Jude Dr., Ste. Genevieve
McDermott, Mrs. A. E., 619 Bruce St.
Utterman, Mrs. William F., 614 S. Main St.

PETTIS COUNTY
(Sedalia)

Beckemeyer, Mrs. W. A., 719 W. 4th St.
Bass, Mrs. William E., 1600 W. 10th St.
Bishop, Mrs. William T., 616 W. 6th St.
Boger, Mrs. John W., 2803 Skyline Dr.
Brady, Mrs. Charles H., 720 W. 5th St.
Campbell, Mrs. Albert J., 1500 W. 16th St.
Campbell, Mrs. Albert J., Sr., 319 E. Broadway
Dyer, Mrs. D. P., 2511 Stephenson Ave.
Edwards, Mrs. David R., 1619 S. Moniteau St.
Fisher, Mrs. Stanley D., 2403 Greenwood Lane
Gonser, Mrs. Karl B., 1619 Broadway
Hite, Mrs. H. A., Greenridge
Hopkins, Mrs. G. G., 524 S. Grand St.
Hopkins, Mrs. Thomas J., 1506 W. Broadway
Lamy, Mrs. John E., 509 W. Broadway
Lemire, Mrs. Robert W., 1814 [illegible] St.
Long, Mrs. Frank B., 723 W. 7th St
Love, Mrs. J. G., 612 S. Kentucky St.
Lowe, Mrs. Alvin L., R. R. 4
Marty, Mrs. L. A., 2308 S. Kentucky St.
Mitchell, Mrs. John E., Broadway Arms
Osborne, Mrs. Charles D., 710 W. Broadway
Proctor, Mrs. Donald C., 908 W. Broadway
Shy, Mrs. Milton P., 1023 W. 7th St.
Siegel, Mrs. Carl D., 810 S. Barrett St.
Siegel, Mrs. Peter V., Smithton
Snavely, Mrs. E. C., 908 S. Grand St.
Stauffacher, Mrs. Gordon C., 1313 W. Broadway
Stewart, Mrs. Robert H., 1815 W. 10th St.
Trader, Miss Frances W., 219 W. 7th St.
Walter, Mrs. A. L., 1000 W. 7th St.
Yancey, Mrs. Edwin F., 803 W. Broadway

ST. LOUIS CITY
(St. Louis)

Ahlering, Mrs. George H., 7129 Lindell Blvd. 30
Allen, Mrs. Willard M., 417 Conway Rd. 41
Alvis, Mrs. Bennett Y., 7011 Washington Ave. 30
Arneson, Mrs. Axel N., 6314 Waterman Ave. 30
Austin, Mrs. Martin G., 119 Summit St. 19
Barden, Mrs. Frank W., 41 Beaver Dr. 41
Bartlett, Mrs. Robert W., 11 Washington Ter. 12
Bartlett, Mrs. Willard, Jr., 6345 Ellenwood St. 5
Bartlett, Mrs. Willard, Sr., 53 Westmoreland Pl. 8
Bartnick, Mrs. Mitchel L., 3895 Holly Hills 16
Bassett, Mrs. Robert Boyd, 2 Beverly Pl. 12
Becke, Mrs. William G., 18 Lorenzo Lane 24
Beckette, Mrs. Edmund S., 7475 York St. 5
Bell, Mrs. Robert M., 35 Glen Rd. 19
Benjamin, Mrs. Durand, 7340 Navarre Circle 23
Berg, Mrs. Ralph, 8064 Watkins Dr. 24
Bergman, Mrs. Hugo F., 2920 Moniteau Dr. 21
Berland, Mrs. Harry I., 29 Granada Way 24
Bilsky, Mrs. Nathan, 7840 Lafon Pl. 30
Bindbeutel, Mrs. Arthur H., 3953 Holly Hills 16
Boedeker, Mrs. Roy V., 2909 Bellerive Dr. 21
Boemer, Mrs. Lilburn C., 49 Clermont Lane 24
Bohrer, Mrs. Harry C., 4112 Flora Pl. 10
Bosse, Mrs. Edwin H., Sr., 6906 Washington Ave. 30
Bowdern, Mrs. Edward H., 2 Berkshire St. 17
Bowersox, Mrs. Warren A., 12 Daniel Rd. 24
Boyd, Mrs. Arthur M., 6556 Delor Ave. 9
Bradley, Mrs. Frank R., 7404 Oxford Dr. 5
Bradley, Mrs. John M., 245 North Union Ave. 8
Brown, Mrs. Clyde O., 7419 York Dr. 5
Brown, Mrs. E. Eugene, 379 N. Taylor Ave. 8
Brown, Mrs. James Barrett, 4 N. Kingshighway 8
Brown, Mrs. Seymour, 2 Ricardo Lane 24
Budd, Mrs. John J., Jr., 6144 McPherson Ave. 12
Burkhart, Mrs. Edward F., 7451 York Dr. 17
Burroughs, Mrs. W. H., 7327 Pershing Ave. 30

Byrne, Mrs. John E., 5878 Delor St. 9
Calkins, Mrs. Deleven, 1515 Schulte Rd. 41
Cameron, Mrs. Solon, 43 Washington Ter. 12
Cannon, Mrs. Edward M., 20 Briarcliff 24
Cannon, Mrs. William J., 9335 White Ave. 17
Cappel, Mrs. Powell B., 27 Old Westbury Lane 19
Carley, Mrs. Harry D., 6820 Delmar Blvd. 30
Carney, Mrs. Joseph E., 6625 Pernod Ave. 9
Carroll, Mrs. George A., 7831 Delmar Blvd. 30
Cassidy, Mrs. Leslie D., 7410 Oxford Dr. 5
Chamness, Mrs. James T., 3 Town & Country Dr. 24
Cherre, Mrs. Charles J., 10 Haddington Court 5
Ciapciak, Mrs. Stanley J., 30 Log Cabin Dr. 24
Clark, Mrs. James F. W., Jr., 905 Fairdale Ave. 19
Collodi, Mrs. George A., 20 Southcote Rd. 17
Conrad, Mrs. A. H., Jr., 9 Dromara Rd. 24
Conrad, Mrs. Marshall B., 8542 Colonial Lane 24
Cook, Mrs. Ralph L., 44 Nolan Dr. 22
Cooper, Mrs. Thomas J., 30 Beverly Dr. 32
Correnti, Mrs. N. A., 6617 Itaska St. 9
Costa, Mrs. Dominic V., 10 Devondale Lane 31
Costello, Mrs. Joseph P., Jr., 57 Berkshire 17
Crossman, Mrs. Robert W., 1509 Holly Dr. 19
Daake, Mrs. John W., 48 Portland Pl. 8
Dalton, Mrs. Arthur R., Conway & Mason Rd. 41
Diehr, Mrs. Alvin H., 29 Rio Vista 24
Dodd, Mrs. Robert B., 32 Jefferson Rd. 19
Doubek, Mrs. John C., High Ridge
Doyle, Mrs. Charles R., 28 Kingsbury Pl. 12
Doyle, Mrs. William J., 4929 McPherson Ave. 8
Drake, Mrs. Truman G., 6344 Alexander Dr. 5
Drews, Mrs. Leslie C., 43 Hillvale Dr. 5
Dreyer, Mrs. Carl J., 204 Kingsville Court 19
Dripps, Mrs. Roy C., 5210 Jamieson St. 9
Eades, Mrs. Dee W., 6 Kingsbury Pl. 12
Edwards, Mrs. Joseph C., 610 W. Polo Dr. 5
Eigel, Mrs. Edwin G., 3654 Flora Pl. 10
Ernst, Mrs. Edwin C., 2 Schultz Rd. 22
Esselbruegge, Mrs. Fred C., 5318 Winona Pl. 9
Farley, Mrs. William W., 2 Spoede Acres 41
Feller, Mrs. Harold H., 5834 Bermuda Rd. 21
Ferguson, Mrs. Thomas B., 8528 Colonial Lane 24
Fish, Mrs. Virgil O., 2500 Town & Country Lane 31
Fitzgerald, Mrs. Leo P., 7219 Cornell Ave. 30
Flotte, Mrs. Bernard H., 6 Lila Lane, Florissant
Flotte, Mrs. Sylvester A., 9113 Glen Garden 36
Ford, Mrs. Lee T., Jr., 45 Green Acres 37
Franklin, Mrs. Max S., 7536 Buckingham Dr. 5
Frerking, Mrs. Herbert W., 11 Bridle Lane 31
Fries, Mrs. Armand D., 11 W. Geyer Lane 31
Fries, Mrs. John W., 106 Frontenac Forest 31
Gantner, Mrs. George E., Jr., 6641 Pershing Ave. 30
Gettinger, Mrs. Andrew J., 8689 Oriole St. 15
Gissy, Mrs. Carl J., 9999 Litzsinger Rd. 24
Glaser, Mrs. Martin J., 3550 Hawthorne St. 4
Glick, Mrs. Harry N., Mason Rd., Rt. 13 22
Goldman, Mrs. Melvin L., 8650 Barby Lane 24
Gomez, Mrs. Cesar A., Jr., 18 Havenview 41
Greiner, Mrs. Theodore, 7507 Washington Ave. 30
Grogan, Mrs. Frank M., 4166 Flora Pl. 10
Grueb, Mrs. Paul M., 6 Grantview Lane 23
Gum, Mrs. William R., 706 Bellerive Blvd. 11
Gundlach, Mrs. Arthur, 8 Alden Lane 41
Gunn, Mrs. Walter T., 6742 Itaska St. 9
Haeberle, Mrs. Frederick S., 3206 Hebert St. 7
Hagebusch, Mrs. Omar E., 16 Covington Lane 32
Hall, Mrs. Preston C., 4243 Lafayette St. 10
Hammond, Mrs. John J., 7245 Maryland Ave. 30
Hampton, Mrs. Stanley F., 93 Lake Forest 17
Hardesty, Mrs. John F., 7506 Byron Pl. 5
Harkins, Mrs. William B., 7 Kingsbury Pl. 12
Harris, Mrs. Charles W., 78 Greendale Dr. 21
Harris, Mrs. Solon P., 7138 Maryland Ave. 30
Harrison, Mrs. Lee B., 44 Ridgemoor Dr. 5
Harting, Mrs. Hugh R., 6330 McPherson Ave. 30
Hassett, Mrs. Henry A., 4440 Lindell Blvd. 8
Hawk, Mrs. Bray O., 3124 Longfellow Blvd. 4
Haynes, Mrs. Pugh, 8006 Gannon St. 30
Heinbecker, Mrs. Peter, 4643 Pershing Ave. 8
Helbing, Mrs. Harry H., 5475 Cabanne Ave. 12
Henderlite, Mrs. John W., 3 S. Tealbrook Dr. 24
Henschel, Mrs. Eugene V., 5815 Eichelberger St. 9
Hildreth, Mrs. H. Rommel, 711 Middle Polo Dr. 5
Hogan, Mrs. Patrick C., 8935 Westhaven Court 26
Hollo, Mrs. Vencel W., 5925 Lindell Blvd. 12
Hosto, Mrs. Leland E., 40 Hillvale Dr. 5
Hotz, Mrs. John W., 141 N. Gay St. 5
Huck, Mrs. Richard F., Jr., 15 St. Alfred Rd. 32
Javaux, Mrs. Everett J., 7820 Delmar Blvd. 30
Jensen, Mrs. Joshua E., 3 Brazilian Court 24
Jones, Mrs. Andrew B., 8100 Gannon St. 30
Jones, Mrs. Otey S., 2010 Longfellow Blvd. 4
Jones, Mrs. Vincent L., 123 N. Forsythe Blvd. 5
Karl, Mrs. Michael M., 14 Thorndell Dr. 17
Kelley, Mrs. Robert W., 5371 Waterman Ave. 12
Kendig, Mrs. John H., 4375 Forest Park Blvd. 8
Kessler, Mrs. Edward H., 8721 Halls Ferry Rd. 15
King, Mrs. Samuel J., 7206 Dale Ave. 17
Kirchner, Mrs. Walter C. G., 7452 Wise Ave. 17
Klaff, Mrs. Daniel D., 919 S. Meramec St. 5
Klein, Mrs. Harry A., 7256 S. Roland St. 21
Klippel, Mrs. Bernhardt W., 52 Fair Oaks 24
Klym, Mrs. Nicholas, 1506 Doris St. 38
Kneal, Mrs. Ellsworth, 725 S. Skinker Blvd. 30
Knight, Mrs. Franklin P., 11465 Fairlane Dr. 36
Knight, Mrs. William A., Jr., 12 Briarcliff 24
Koetter, Mrs. A. F., 6208 Rosebury Dr. 5
Koon, Mrs. Bernard T., 2623 Gurney Court 10
Kountz, Mrs. William B., 2619 Gurney Court 10
Koutsoumpas, Mrs. William V., 3024 Hawthorne St. 4
Kowert, Mrs. Edward H., 662 Elwood St. 19
Kramolowsky, Mrs. H. H., 546 Sheffield Ave. 19
Ladd, Mrs. Charles B., 1237 Visitation Dr. 25
Langsdorf, Mrs. Herbert S., 3681 Alberta Ave. 16
Lansche, Mrs. Elmer A., 8358 Racquet Dr. 21
Lawton, Mrs. Thomas P., 410 N. Newstead Ave. 8
Leavy, Mrs. Charles A., 9058 Monmouth Dr. 17
Lembeck, Mrs. Joseph A., 4103 Flora Pl. 10
Lerwick, Mrs. Everett R., 5342 Mardel St. 9
Lieb, Mrs. Francis X., 19 Ridgemoor St. 5
Lohr, Mrs. Curtis H., 601 S. Brentwood Blvd. 5
Lottes, Mrs. J. Otto, 1028 Winwood Dr. 24
Lucido, Mrs. Joseph L., 6 Bellerive Acres 21
Lutz, Mrs. Martin H., 31 Aylsbury St.
Macdonald, Mrs. John W., 4525 Lindell Blvd. 8
Macdonald, Mrs. William C., 63 Briarcliff 24
Martin, Mrs. Raymond T., 3468 Longfellow Blvd. 4
Mason, Mrs. Roy E., 7130 Maryland Ave. 30
Mathae, Mrs. George H., 3167 S. Grand Blvd. 18
Meisenbach, Mrs. A. Edward, 5475 Cabanne Ave. 12
Mendonsa, Mrs. Lawrence E., 2126 Blendon Pl. 17
Merenda, Mrs. Sam J., 45 Berry Rd. Park 22
Merklin, Mrs. Anton L., 5926 Crane Circle 9
Mier, Mrs. Thomas M., 516 Overhill Dr. 30
Morfit, Mrs. John C., 7627 Wydown Blvd. 5
Moskop, Mrs. Peter G., 3736 Dunnica St. St. 16
Mowrey, Mrs. William O., 7071 Lindell Blvd. 30
Mueller, Mrs. Robert, 683 W. Lockwood Ave. 19
Mueller, Mrs. W. K., 1160 S. McKnight Rd. 17
Muether, Mrs. Raymond O., 19 Country Life Acres 31
Murphy, Mrs. James P., 27 Berkshire St. 5
Murray, Mrs. Louis F., 6014 Tennessee St. 11
Neilson, Mrs. Arthur W., 6349 Alexander Dr. 5
Nemec, Mrs. Stanley S., 2870 S. Lindbergh Blvd. 31
Nester, Mrs. Charles A., 3921 Federer Pl. 16
Neun, Mrs. William F., 5862 Delor St. 9
Northup, Mrs. Glenn R., 7371 Princeton Ave. 30
Nye, Mrs. William R., 4852 S. Broadway 11
Obermeyer, Mrs. Charles G., 3957 Holly Hills 16
Oppenheimer, Mrs. Henry E., 10 Enfield Rd. 32
O'Reilly, Mrs. D. Elliott, 9054 Clayton Rd. 17
Orenstein, Mrs. Joseph M., 417 Jackson Ave. 30
O'Sullivan, Mrs. George A., 6181 Lindell Blvd. 12
Parashak, Mrs. Paul M., 7344 Whitehaven Dr. 23
Parsons, Mrs. Ernest H., 410 N. Newstead Ave. 8
Peeler, Mrs. James O., 10000 Knoll Crest Court 36
Pernoud, Mrs. F. G., Jr., 841 Audubon Dr. 5
Pernoud, Mrs. Michael F., 51 Frontenac Dr. 31
Plag, Mrs. Albert F., 3150 Morganford Rd. 16
Powers, Mrs. Pierce W., 4 Crestwood 5
Pulliam, Mrs. Madison J., 7524 Cromwell Ave. 5
Pyne, Mrs. Herbert S., 5329 Mardel St. 9
Ramsey, Mrs. Robert H., 10 Lake Pembroke 35
Reich, Mrs. Harry A., 6230 Devonshire Ave. 9
Reilly, Mrs. Leo J., 6219 McPherson Ave. 30
Rendleman, Mrs. George F., 532 Midvale Ave. 30
Repetto, Mrs. Albert M., 6359 Murdock St. 9
Reuter, Mrs. Louis A., 2 Kingsbury Pl. 12
Riesmeyer, Mrs. L. T., 2612 S. Grand Blvd. 18
Riley, Mrs. John J., 725 Paddock Dr., Florissant
Riley, Mrs. William H., 6213 Mardel St. 9

Riordan, Mrs. Laurence M., 410 N. Newstead Ave., 8
Rohlfing, Mrs. Walter A., 3838 Federer Pl. 16
Roy, Mrs. Joseph A., 9412 Acosta Dr. 37
Royce, Mrs. Robert K., 410 W. Swan Ave. 19
Ruddell, Mrs. George W., 1333 Highmount 35
Sammons, Mrs. Harry C., 128 W. Jewel St. 22
Sanders, Mrs. Robert D., 4212 Flora Pl. 10
Sante, Mrs. LeRoy, 308 Orchard 19
Schaerer, Mrs. Jacques P., 11 Schultz Rd. 22
Scheer, Mrs. George E., 53 Berkshire Dr. 17
Scherman, Mrs. Victor E., 245 N. Union Blvd. 8
Schmidt, Mrs. Edwin H., 10240 Schuessler Rd. 28
Schmiemeier, Mrs. Herman A., 6217 Delor St. 9
Schmiemeier, Mrs. Roy H., 10220 Schuessler Rd. 28
Sciortino, Mrs. Gaspare, 1019 Laval St. 32
Scott, Mrs. Elwin P., 3258 Lafayette St. 4
Sexton, Mrs. Daniel L., 14 Crestwood Dr. 5
Sexton, Mrs. Elmer E., 2537 Town & Country Lane, 31
Shaner, Mrs. John F., 25 Bellerive Acres 21
Sherwin, Mrs. Charles F., Lonedell
Sherwin, Mrs. Charles A., 3971 Flora Pl. 10
Simon, Mrs. Jerome I., 12 Westridge Court 24
Simpson, Mrs. Guy, 13 The Orchards 32
Smith, Mrs. Benjamin F., 104 Aberdeen Pl. 5
Smith, Mrs. Hugh R., 8836 Rock Forest 23
Smolik, Mrs. Edmund A., 59 Middlesex Dr. 17
Spoeneman, Mrs. Walter H., 18 Biritz Court 15
Stamp, Mrs. Warren G., 14 Holiday Lane 31
Stanze, Mrs. F. J., 3924 S. Grand Ave. 18
Stindel, Mrs. Charles E., 341 Violet Lane 19
Stone, Mrs. Charles A., 111 Calverton Rd. 35
Stroud, Mrs. C. Malone, 6232 McPherson Ave. 30
Sudholt, Mrs. Alfred F., Jr., Rt. 1, Box 110, 41
Sullivan, Mrs. Clement J., 6371 Waterman Ave. 30
Sweet, Mrs. Herbert C., 3 St. James Court 19
Thale, Mrs. Thomas, 3673 DeTonty St. 10
Thoma, Mrs. George E., 49 Arundel Pl. 5
Thompson, Mrs. J. William, 92 Lake Forest 17
Thomson, Mrs. David A., 8015 Delmar Blvd. 30
Thym, Mrs. Henry P., 6 Ridgeton Dr. 17
Tjoflat, Mrs. Oliver E., 252 Woodbourne St. 5
Tremain, Mrs. Irl G., 4254 Flora Pl. 10
Twedell, Mrs. Donald L., 5341 Bermuda Rd. 21
Uhlemeyer, Mrs. Henry A., 410 Fairview Pl. 19
Unterberg, Mrs. Hillel, 31 Hillvale Dr. 5
Vandover, Mrs. John T., 3 Grantwood Lane 23
Vest, Mrs. James C., 309 N. Sappington Rd. 22
Virant, Mrs. John A., 119 Spoede Rd. 41
Vitt, Mrs. Alvin E., 2 Dromara Pl. 24
Vogler, Mrs. Alfred T., 5021 Queens Ave. 15
Vohs, Mrs. Carl F., 7407 Cromwell Dr. 5
Von Kaenel, Mrs. Joseph E., 551 Barnes Rd. 24
Wagenbach, Mrs. William F., 7348 Grandbury St. 23
Wegner, Mrs. Carl R., 7401 Wellington St. 30
Weinel, Mrs. Francis G., 333 Oakwood St. 19
Weinsberg, Mrs. William C., 6220 Helm St. 9
Wennerman, Mrs. Sam F., 501 Warren St. 30
Werner, Mrs. William A., 6015 Childress Ave. 9
Wiegand, Mrs. Herbert C., 40 Overhills Dr. 21
Wilcox, Mrs. Claude V., 7022 Tholozan St. 9
Wilson, Mrs. Keith S., 9 Crestwood Dr. 5
Winter, Mrs. William O., 1030 Yale Ave. 17
Winterer, Mrs. Roland A., 2 Zinzer Court 23
Wirthlin, Mrs. Edward H., 4709 Vienna St. 9
Witt, Mrs. Clyde M., 11 Deer Creek Woods 24
Wood, Mrs. V. Visscher, 6368 Washington Ave. 30
Wotawa, Mrs. William J. 3804 Wilmington Ave. 16
Yaeger, Mrs. Gerald A., 9388 White Ave. 17
Young, Mrs. Leo P., 5046 S. Grand Ave. 11
Zahorsky, Mrs. Theodore S., 15 Arundel Pl. 5
Zeitler, Mrs. William T., 152 Timbercrest Rd. 22
Zink, Mrs. Oscar C., 9 The Orchards 32

ST. LOUIS COUNTY

Bagby, Mrs. J. W., 7 Country Life Acres, St. Louis 31
Bailey, Mrs. William H., 9157 E. Milton St., Overland 14
Barnett, Mrs. Julian H., 843 Edlin Dr., Kirkwood 22
Berndsen, Mrs. Gerald H., 1220 Oakleaf Dr., Rock Hill 19
Bernstein, Mrs. Aaron M., 7033 Cornell Ave., University City 30
Bernstorff, Mrs. Paul H., 201 Calverton Rd., Ferguson 35
Berwald, Mrs. Irvin I., 747 Old Bonhomme Rd., University City 32
Blankenship, Mrs. D. M., 330 Henry Ave., Manchester
Boles, Mrs. C. Read, 9307 Old Bonhomme Rd., St. Louis 32
Bolinske, Mrs. Robert E., 16 Chaminade St., St. Louis 17
Briscoe, Mrs. John R., 10053 Briarwood, Ladue 24
Brother, Mrs. George M., 15 Frederick Lane, Glendale 22
Brown, Mrs. Eugene R., 7433 Gannon Ave., University City 30
Brown, Mrs. W. Sidney, 556 Bedford Ave., University City 30
Cacioppo, Mrs. Joseph E., 1809 New Jamestown Rd., St. Louis 38
Callahan, Mrs. Donald E., 4085 Bondurante, Bridgeton
Carlson, Mrs. Arne E., 89 Pebblebrook Lane, Creve Coeur 41
Catanzaro, Mrs. R. E., 24 Foxboro Rd., Ladue 24
Chinsky, Mrs. Murray, 7200 Colgate Ave., University City 30
Coates, Mrs. Thomas, 39 Clermont Lane, St. Louis 24
Coldwater, Mrs. Kenneth, 1520 Ridgewood Dr., St. Louis 26
Costrino, Mrs. John J., 922 Jeanerette Dr., University City 30
Costrino, Mrs. Joseph A., Box 419, Conway Rd., Creve Coeur 41
Cowdry, Mrs. Edmund V., Jr., 30 Crestwood Dr., Clayton 5
Davidson, Mrs. Morris, 128 Frontenac Forest, St. Louis 31
Davis, Mrs. Edgar W., 49 Woodcrest Dr., Ladue 24
Denny Mrs. Robert B., 7827 Delmar Blvd., University City 30
Deyton, Mrs. John W., 659 Fairview Ave., Webster Groves 19
Diehr, Mrs. Maurice A., 28 Dromara Rd., Ladue 24
Dill, Mrs. Foster A., 1551 Bellevue Ave., Richmond Heights 17
Doisy, Mrs. Robert A., 103 Edwin Ave., Glendale 22
Dowd, Mrs. James F., 30 Brentmoor Park, Clayton 5
Drescher, Mrs. Emmett B., 619 Haverford Rd., St. Louis 22
Duane, Mrs. George W., 9105 Sioux Dr., Affton 23
Dyer, Mrs. Clyde P., 371 Gray Ave., Webster Groves 19
Eidelman, Mrs. Jack R., 8001 Watkins Dr., Clayton 5
Eller, Mrs. C. Howe, 1408 Fawnvalley Dr., St. Louis 31
Ellis, Mrs. Calvin C., 11627 Fallbrook Dr., St. Louis 31
Ellison, Mrs. Leroy E., 7346 Myrtle Ave., Maplewood 17
Emerson, Mrs. Reynolds L., 618 S. Rock Hill Rd., Webster Groves 19
Estes, Mrs. Jack M., 57 Dellwood, St. Louis 35
Eversoll, Mrs. Norton J., 6356 Clayton Rd., St. Louis 17
Fairshter, Mrs. Alex E., 9 Blackpool Lane, Olivette 32
Ferrara, Mrs. John P., 31 Bellerive Acres, Normandy 21
Finkel, Mrs. Barney W., 7210 S. Bristol Dr., Normandy 21
Finley, Mrs. F. L., 2475 Hartland Ave., Overland 14
Fletes, Mrs. James W., 5601 Lindell Blvd., St. Louis 12
Flynn, Mrs. Thomas T., 429 Forest Green, Webster Groves 19
Forsman, Mrs. Waldo W., 4128 S. Lindbergh, Sappington 27
Freiheit, Mrs. Harold J., 17 Ladue Manor, Ladue 24
Froelich, Mrs. Edwin J., 7321 Overbrook Dr., St. Louis 21
Fuchs, Mrs. George J., 1 Fawnridge Court, Creve Coeur 41
Gaines, Mrs. Quentin M., 136 W. Mermod Pl., Kirkwood 22
Gall, Mrs. Ira G., 333 Tanglewood, Ladue 24
Gitt, Mrs. Joseph J., 1025 S. Warson Rd., Ladue 24
Goodman, Mrs. Nathanial, 9 Scarsdale Lane, Richmond Heights 17
Goodrich, Mrs. Harold A., 52 S. Rock Hill Rd., Webster Groves 19
Grundmann, Mrs. William H., 6948 Delmar Blvd., University City 30
Hale, Mrs. T. H., 301 N. Forsythe Blvd., Clayton 5
Hall, Mrs. Eugene W., 4300 Roland St., Normandy 21
Hamilton, Mrs. Caldwell K., 11317 Mosley Lane, Creve Coeur 41
Hampton, Mrs. Oscar P., 8153 Stanford Court, University City 31
Hamtil, Mrs. Edward W., 4321 Bonfils Dr., Bridgeton
Hayward, Mrs. John D., 221 S. Clay Ave., Kirkwood 22
Helbing, Mrs. Edward J., 698 Greenview Dr., Glendale 22
Hobbs, Mrs. Alonzo G., 8000 Washington St., St. Louis 14
Hobbs, Mrs. John E., 25 Woodcrest Dr., St. Louis 24
Hogancamp, Mrs. Charles E., 1911 N. Signal Hill, Kirkwood 22
Holscher, Mrs. Edward C., 234 W. Jackson Rd., Webster Groves 19
Hoppe, Mrs. Robert C., 29B E. Circle Dr., St. Louis 25
Howe, Mrs. Louis F., 1136 Ridgelynn Dr., St. Louis 24
Huck, Mrs. Frank F., Smizer Mill Rd., Fenton
Hughes, Mrs. Robert G., 41 Chaminade, Creve Coeur 41
Irick, Mrs. Carl C., 227 E. Lockwood Ave., Webster Groves 19
Izmirlian, Mrs. Grant, 525 Fairview Ave., Webster Groves 19
Kendis, Mrs. Joseph B., 19 Warson Ter., Clayton 24
Kilker, Mrs. Clarence H., 7231 Winchester Dr., Normandy 21
Kimelman, Mrs. Nathan, 21 Granada Way, St. Louis 24
King, Mrs. E. E., 2915 Bellerive Dr., Normandy 21
Kingsland, Mrs. Robert C., 12 Oak Ter., Webster Groves 19
Kloeppel, Mrs. Carl F., Rt. 2, Box 563, Fenton
Knock, Mrs. Henry L., 33 Algonquin Wood, Glendale 22
Koch, Mrs. Robert E., 10036 Conway Rd., Ladue 24
Kopp, Mrs. Jules H., 7679 Carswold Dr., Clayton 5
Krieger, Mrs. John L., 28 Berry Rd. Park, St. Louis 22
Kurth, Mrs. Robert K., 311 Dobbin Rd., Webster Groves 19
Lansche, Mrs. W. Edward, 1322 McCutcheon, Richmond Heights 17
Lerner, Mrs. A. F., 7545 Parkdale Ave., Clayton 5
Leslie, Mrs. C. H., 1313 N. Harrison Ave., Kirkwood 22

Lord, Mrs. Richard, 325 Park Ave., Glendale 22
Luke, Mrs. Herbert, 671 Hargrove, St. Louis 31
Lund, Mrs. Herluf G., 26 York Dr., Brentwood 17
McCall, Mrs. Edwin L., 519 Wilcox St., Kirkwood 22
McLean, Mrs. Royal C., 520 W. Jewel St., Kirkwood 22
McNalley, Mrs. Frank P., 8019 Watkins Dr., Clayton 5
McNalley, Mrs. Michael, 430 Miriam Ave., Kirkwood 22
McShane, Mrs. Quentin W., 7139 Cornell Ave., University City 30
Magidson, Mrs. Joseph S., 615 Forest Court, Clayton 5
Magness, Mrs. Guy N., 7727 Blackberry Lane, University City 30
Mahe, Mrs. George A., 135A N. Hanley Rd., Clayton 5
Marcus, Mrs. M. D., 8227 Balson Ave., University City 32
Mayer, Mrs. Robert A., 7509 Wayne Ave., University City 30
Meador, Mrs. James R., 9 Bellerive Acres, Normandy 21
Mezera, Mrs. Raymond A., 7135 Forsyth Blvd., St. Louis 5
Miles, Mrs. Paul W., 2919 Moniteau Dr., St. Louis 21
Miller, Mrs. Charles, Jr., 206 N. Fillmore St., Kirkwood 22
Molden, Mrs. Charles A., 36 Bellerive Acres, Normandy 21
Moore, Mrs. Harry G., 17 Westmoreland Pl., St. Louis 8
Moore, Mrs. William E., 7277 N. Roland Blvd., Normandy 21
Mueller, Mrs. Robert J., 40 Huntleigh Woods, St. Louis 31
Nakada, Mrs. James R., 2 Huntleigh Downs, Kirkwood 31
Nelson, Mrs. J. Roger, 529 Pamela Lane, Kirkwood 31
O'Connell, Mrs. John J., 1922 O'Connell Ave., Overland 14
Ott, Mrs. Harold J., 29 Bopp Lane, St. Louis 31
Ottensmeyer, Mrs. Charles D., 2035 Goodale, Overland 14
Parker, Mrs. Brent M., 277 Edwin St., Glendale 22
Pawol, Mrs. Sylvester E., 11701 Old St. Charles Rd., Bridgeton
Pennoyer, Mrs. James, 117 Plant Ave., Webster Groves 19
Peugnet, Mrs. Hubert B., 327 N. Taylor Ave., St. Louis 8
Phillips, Mrs. Hanford, 215 Graybridge Rd., Clayton 24
Platt, Mrs. William R., 57 Ridgemoor Dr., Clayton 5
Redington, Mrs. James C., Jr., 1 Tuscany Park, St. Louis 5
Reiches, Mrs. Aaron J., 11 Brazilian Court, St. Louis 24
Reilly, Mrs. Pierce J., 18 S. Kingshighway Blvd., St. Louis 8
Reinhard, Mrs. Edward H., 235 Sylvester Ave., Webster Groves 19
Rennard, Mrs. Marvin, 7507 Buckingham, Clayton
Reynolds, Mrs. Fred C., 10094 Briarwood Dr., Ladue 24
Roberts, Mrs. Harold K., 434 S. Hanley Rd., Clayton 5
Robertson, Mrs. Frank G., 642 N. Forest, Webster Groves 19
Roblee, Mrs. Melvin A., 5 Kingston Manor, Ladue 24
Rogers, Mrs. John A., 527 Warren Dr., University City 30
Rolufs, Mrs. Lloyd S., 472 Gabriel Dr., Kirkwood 22
Rosenbaum, Mrs. Herbert E., 7393 Westmoreland Pl., University City 30
Rosenberg, Mrs. Henry E., 2130 S. Warson Rd., Ladue 24
Rubin, Mrs. Robert, 501 N. Central St., St. Louis 30
Schattyn, Mrs. J. Martyn, 9 Huntleigh Downs, Kirkwood 31
Schluer, Mrs. P., 9 Long Meadows Lane, St. Louis 31
Schopp, Mrs. Alvin C., 8128 Glen Echo Dr., Normandy 21
Schwartz, Mrs. Melvin M., 7486 University Dr., University City 30
Seabold, Mrs. John A., 408 Mission Court, University City 30
Shepherd, Mrs. Charles T., 10 Covington Meadows, Clayton 32
Simril, Mrs. Wayne A., 423 Polo Dr., Clayton 5
Sisk, Mrs. James C., 146 Frontenac Forest, St. Louis 31
Smith, Mrs. George E., 637 Tarrymore Lane, Kirkwood 22
Speno, Mrs. Angelo A., 1706 Red Bird Cove, Brentwood 17
Spitzer, Mrs. Ernest, 6637 Kingsbury Blvd., University City 30
Steiner, Mrs. A. J., 8009 Gannon St., University City 30
Sterling, Mrs. C. E., 3055 Lindbergh Blvd., St. Ann
Strauchen, Mrs. G. William, 47 W. Old Watson Rd., Webster Groves 19
Stuebner, Mrs. Roland W., 18 Dromara Rd., St. Louis 24
Sutter, Mrs. Richard A., 7215 Greenway Ave., University City 30
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When Dr. William Hotchkiss died in St. Louis April 1, 1895, his Masonic record could be traced back only one hundred years; but he was reported to be 140 years old.

Better grades noted in Foreign Medical Graduate Examinations in several Eastern cities are credited to Junior Leaguers who have volunteered to give English instructions to foreign interns and residents.

Interview with Kansas City General Hospital nurse, Mrs. Neville Hill, in *The Kansas City Star:* ". . . we stopped the bleeding, splintered *(sic)* them and treated for shock before we sent them on up for more treatment."

Among other animals used in space flight experiments, the Air Force utilizes opossums. Their value lies in the fact that they faint when they're in trouble.

Capsule Clinics

- Ionizing radiation in the dose used for head and neck tumors does not cause microscopically detectable changes during the course of treatment in the cochlea or labyrinth. Borsanyi, S. et al., Ann. Otol., Rhinol. & Laryngol. **70**:255, 1961.
- Local application of hydrocortisone in total amounts of 8,750 to 95,000 mg. over a period of three to 20 months failed to produce major systemic effects. Fleischmajer, R., J. Invest. Dermatol. **36**:11, 1961.
- Single oral doses of 1.5 to 2 mg. per Kg. ferrous sulfate as elemental iron are more efficiently absorbed than larger doses when administered under fasting conditions. Woodruff, C. W., Pediat. **27**:194, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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LEGISLATION AFFECTING THE PRACTICE OF MEDICINE

The Legislature adjourned sine die June 30, 1961. Legislation, finally passed, will take effect October 13, 1961, if approved by the Governor. One exception to this is H. B. 35.

LEGISLATION PASSED

H. B. 35. Withholding of State Income Taxes by Employers. This act, adopted by both houses with an emergency clause, took effect July 1, 1961. The act provides that all employers, including physicians, shall withhold state income taxes from the wages of their employees, and transmit such withheld wages to the state every three months. For information and necessary forms write to Department of Revenue, Withholding Tax Section, P. O. Box 999, Jefferson City, Mo.

H. B. 157. Competency of Minor. This act provides that any married minor and any minor parent shall be considered to be an adult for the purpose of consenting to medical and surgical care for himself, his spouse or his child.

H. B. 182. Joint Licensure Law. This act eliminates a paragraph of the present Joint Licensure Law which licensed one individual.

Senate Committee Substitute for S. B. 77. Chiropody. This act, as originally drafted, provided that chiropodists would be permitted to use drugs and medicines for the treatment of ailments of the human foot. The Senate Committee substitute, however, limits the use of drugs and provides that none may be used for the treatment of systemic diseases.

While H. B. 633 and H. B. 690, dealing with implementation of the Kerr-Mills Act, did not pass, House Concurrent Resolution 24 creates a committee of the legislation to study the problem of providing medical assistance to the senior citizens of Missouri. This resolution was adopted, as follows:

WHEREAS, One of the major problems for the senior citizens of our nation is obtaining necessary and proper medical assistance; and

WHEREAS, This problem is especially acute in Missouri because of the unusually high percentage of elderly people residing in our state; and

WHEREAS, The General Assembly has been unable to arrive at acceptable solutions for this problem because of the lack of sufficient information and because the pressure of legislative activity leaves little time for a detailed study of situations and conditions relative to the problem; and

WHEREAS, The members of the House Committee on Public Health and Welfare recommended the establishment of an interim committee to make a complete investigation in this area; now, therefore be it

Resolved, By the House of Representatives, the Senate concurring therein, that a joint committee of the general assembly be created to be composed of five members of the House to be appointed by the Speaker of the House, and five members of the Senate to be appointed by the President Pro Tem, to make a complete and thorough study of the problem of providing medical assistance to the senior citizens of Missouri; and be it further

Resolved, That the committee and its members are authorized to hold meetings and perform their duties during the interim between the adjournment of the 71st General Assembly and the convening of the 72nd General Assembly; and be it further

Resolved, That the committee prepare and submit a report to the 72nd General Assembly by the end of the second legislative week of the regular session thereof, together with the proposals it deems appropriate; and be it further

Resolved, That the Committee on Legislative Research be requested to provide professional, clerical or other services as the committee may require in the performance of its duties; and be it further

Resolved, That the actual and necessary expenses of the committee shall be paid from the joint contigent fund.

H. B. 133. Chiropractic. The chiropractic bill was adopted and the new definition of chiropractic is as follows: "The practice of chiropractic is defined to be the science of palpating and adjusting by hand the movable articulations of the human spinal column, for the correction of the cause of abnormalities and deformities of the body. It shall not include the use of surgery, obstetrics, osteopathy, nor the administration or prescribing of any drug or medicine, radioactive substance or radiation other than *x-ray spinograms.*

H. B. 105, 106, 107. Appropriations. These bills

(Continued on page 884)

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WASHINGTON

The American Medical Association opposed three major provisions of a bill (S. 1552) that would greatly increase the powers of the federal government in regulation of the ethical drug industry.

These three provisions would turn over to the Department of Health, Education and Welfare and the Food and Drug Administration the responsibility for (1) relaying of drug information to physicians, (2) selecting the names of new drugs, and (3) deciding whether a drug is of value in treating human ills.

The AMA did not take a position on the bill as a whole because certain of its provisions, "such as the Sherman Act and patent law amendments, are outside our area of competence."

Dr. Hugh H. Hussey, Jr., Chairman of the AMA's Board of Trustees and Dean of Georgetown University School of Medicine, was the chief AMA witness at the opening of hearings on the legislation before the Senate Antitrust and Monopoly Subcommittee headed by Sen. Estes Kefauver (D., Tenn.). Dr. Hussey was accompanied by Dr. Ernest B. Howard, Assistant Executive Vice President of AMA, and C. Joseph Stetler, AMA's General Counsel.

With Congress trying for adjournment by about Sept. 1 and much "must" legislation still to be acted upon, it appeared highly unlikely that Congress would complete action on the drug legislation this year.

Dr. Hussey reviewed for the subcommittee AMA's 70-year record of taking the lead in endorsing legislation designed to insure the purity of drugs and food. The AMA carried on intensive legislative efforts in the field and "is generally credited with being one of the major forces that brought the first Pure Food and Drug Act into being" in 1906, Dr. Hussey said.

Dr. Hussey cited these AMA aims that "we, as physicians, are desirous of achieving:

"We want all physicians to be well-trained and fully informed on all aspects of the practice of medicine.

"We want this body of knowledge and reservoir of skills to include a high degree of competence in the selection and proper use of drugs.

"We want a continuing and expanding flow of useful drug products placed at the disposal of these physicians."

Dr. Hussey pointed out that the AMA already conducts an intensive program of informing physicians about new drugs and that this program is now in process of being greatly stepped up.

"The medical profession believes that the education of physicians is the responsibility and prerogative of the profession itself," he said.

Assigning responsibility for selecting names of new drugs to the federal government would merely be duplication of the program of drug nomenclature which has been operated for many years by the AMA and the pharmaceutical industry, Dr. Hussey declared. This program also has recently been refined and improved, and will continue to meet the need for an orderly system for selecting names for new drugs.

In the final analysis, it is the physician and the pharmacist who must know the nonproprietary names of drugs, he said. These two professions now direct this naming process, and "we do not believe the responsibility for designating and revising names should be assigned to a governmental agency," he said.

Regarding determination of the efficacy of a new drug, Dr. Hussey said:

"We believe that only the physician has the knowledge, ability and responsibility to make a decision as to what drug is best for a particular patient. He should not be deprived of the use of drugs that he believes are medically indicated for his patient by a governmental ruling or decision."

"Physicians seek to treat the medical problems of individual patients. A physician does not treat ten cases of hypertension, he treats ten individual patients, each of whom has a medical problem he has diagnosed as hypertension. He may find that the same dosage of the same form of the same drug will be efficacious in each and all of his ten patients.

"Or he may find that one or more of them need different dosages, or different forms of this same drug. He may, indeed, find that one, two or three of them are allergic to the nonactive ingredients used in this brand of the drug, and that a different brand, with other nonactive ingredients, is the proper answer.

"Thus, in one patient, a specific dosage of a specific drug might be said to be efficacious. While in another, it would be described as totally ineffective.

"A physician can be told many things about a drug, including its chemistry, its mode of action and, to some extent, its toxic properties. But he must judge its efficacy."

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1. Barden, F. W., et al.: J. Maine M. A. 46:99, 1955.
2. Ford, R. A., and Blanchard, K.: Journal-Lancet 78:185, 1958.

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Across
Missouri

Missouri State Medical Foundation

The Missouri State Medical Foundation, the organization sponsored by the Missouri State Medical Association to provide financial aid to medical students who are residents of the state, was chartered on March 31 of this year. The foundation provides a permanent revolving loan fund, making individual loans of up to $1,000 a year to deserving medical students from Missouri.

Officers of the Foundation are Raymond O. Muether, M.D., St. Louis, president; Leonard T. Furlow, M.D., St. Louis, vice president, and Charles R. Doyle, M.D., St. Louis, secretary-treasurer. On the Board of trustees are Ben M. Bull, M.D., Ironton; Kenneth C. Hollweg, M.D., Kansas City, and Walter W. Tillman, M.D., Springfield. J. H. Summers, M.D., Lebanon, President of the Missouri State Medical Association, serves in an ex-officio capacity on the board.

The financial aid program was begun in August 1960 by the Council of the Association. The House of Delegates approved the Foundation at the 1961 session and incorporation proceedings were completed on March 31. The amount furnished the Foundation by the Association is $50,000. It is hoped that contributions and endowments will increase that amount.

In the first 11 months of the program, loans totaling $35,915 were granted to 69 medical students. Most of the loans have gone to students in the three medical schools in the state, although they are available to any permanent resident of the state attending any of the 85 accredited medical schools in this country.

Application blanks are available through the offices of the deans of the three medical schools or directly from the Foundation office, 634 North Grand Blvd., St. Louis 3, Mo.

Missouri Population Increase Predicted

A recent issue of *Business and Economic Review,* a publication of the University of Missouri, predicts an increase in the population of Missouri of 443,000 by 1970, and near 1,000,000 by 1980. This would bring the population of the state to 4,763,000 by 1970 and to 5,310,000 by 1980.

The prediction is predicated on continuation of the 1950 patterns with survival rates expected to remain on the 1949-51 level. No loss by out-migration from the metropolitan areas is expected but the rest of the state is expected to lose population by out-migration.

The United States Bureau of Census recently reported that Missouri lost 130,000 by out of the state migration between 1950 and 1960. There were 949,000 births and 453,000 deaths in the state in the 10 year period, giving a net increase of 365,000.

Automobiles in the State's Economy

One is inclined to take the automobile as just a part of life today, unless one reads in medical annuals about the first physician in a county to use an automobile for his house calls. However, the automobile has become a large factor in the economy of the state, according to statistics recently released by the Automobile Manufacturers Association.

It is reported that automotive operations in Missouri generated more than $2.6 billion in business activity in 1958 and that sales of automotive products and services accounted for 17.3 per cent of the total sales and service business in the state.

The report showed that 15,689 shops and plants were involved in the distribution, sale and maintenance of motor vehicles, employing 67,555 persons, or 14.9 per cent of the state's entire retail, wholesale and service business working population.

The number of vehicle registrations in Missouri rose from 1,744,530 in 1959 to an estimated 1,790,000 in 1960. Missouri motorists paid $98,382,000 in federal excise taxes on motor vehicles, fuel and parts in 1959, and $81,080,000 in special motor user taxes levied by the state, which comprised 28 per cent of all Missouri tax collections.

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Reference: 1. Scal, J. C.: Eye Ear Nose & Throat Month. 38:738 (Sept.) 1959.

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Missouri Academy of General Practice

A meeting of the Board of Directors of the Missouri Academy of General Practice was held at the Daniel Boone Hotel, Columbia, Thursday night, May 11, during the Spring Clinical Conference at Missouri University Medical School. Chairman, P. C. Hall, St. Louis, presided.

Among actions taken was a decision to enter into contract with the Trails Press, Inc., Boonville, for issuance of a state academy publication.

The board met on May 11.

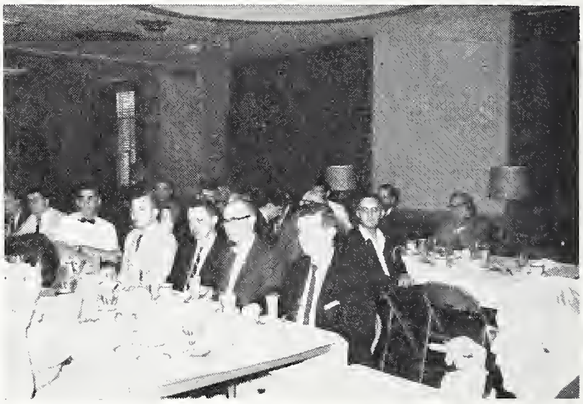
The first issue of the publication, called "Missouri Family Doctor," was issued on July 1, 1961. The medical editor will be William C. Allen, M.D., Jefferson City.

New member applications approved were: Drs. Carlo Rao, Paul H. Hilbert and Leroy Dabbs, St. Louis; Donald E. Frein, Leeton, and Tom R. Burcham, Jr., Doniphan. Drs. William R. Morris, Raytown; Ivan Edward Lloyd, Independence, and Charles A. Spears, Branson, were elected to membership through transfer from other state academies.

The program for the 1961 MAGP Scientific Assembly, November 4-5, at Hotel Muehlebach, Kansas City, was approved. There will be four symposia, to wit: "Therapeutics," "General Session," "Medicine" and "Surgery." Panel discussions will follow each symposium. The banquet speaker will be Mr. Horace Cotton, Executive Editor of *Medical Economics.*

A one-day program, arranged by the MAGP Education Committee, was approved by the Board, to be held on Sunday, July 30, at Arrowhead Lodge, Lake of the Ozarks.

The Board received a report of a successful luncheon meeting involving senior medical students at Missouri University sponsored by the Public and Professional Relations Committee of the MAGP and the Rural Health Committee of the Missouri State Medical Association. This session was held at noon on May 11 to discuss the general practice of medicine with these seniors.



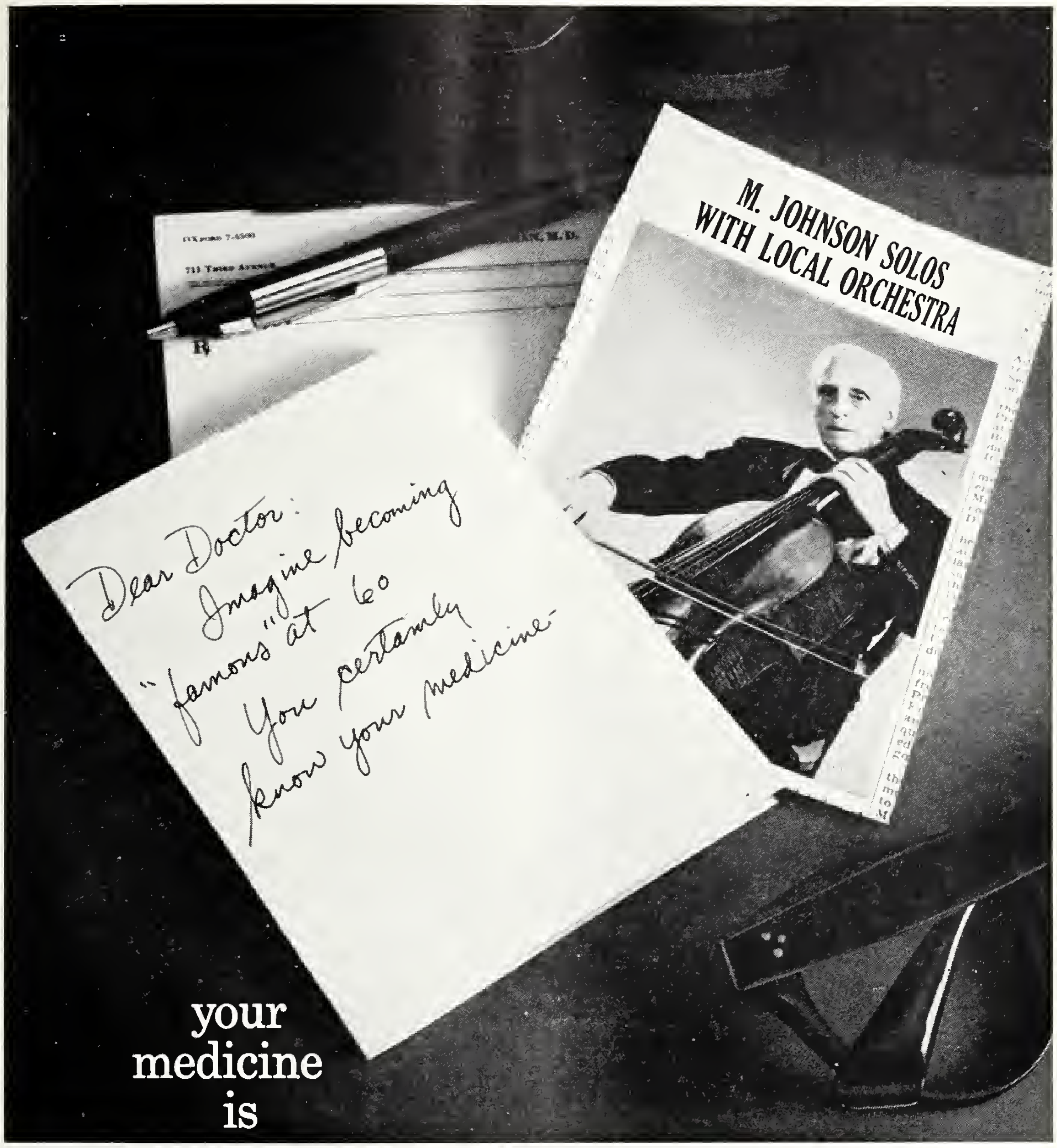
Officers of the Academy were present at the senior medical student luncheon.

Roy Pearse, M.D., Nevada, reported for himself and Charles Metz, M.D., St. Louis, as delegates to the AAGP meeting at Miami Beach in April.

In spite of inclement weather approximately 200 people, including doctors, their wives and guests, attended the Spring Scientific Symposium presented by the St. Louis Academy of General Practice at the Chase Hotel, St. Louis, Sunday,

(Continued on page 884)

Dr. Michael, president, presided at St. Louis Academy banquet.



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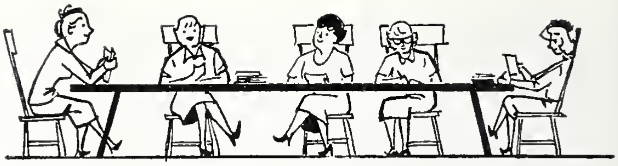

Our Auxiliary theme for 1961-62 is "Speak Your Beliefs in Deeds."

Mrs. Frederick E. Wade

The national convention in New York in June was devoted to a review of past activities and plans for charting our future course. Mrs. Harlan English, our new national president, said our opportunity and challenge lies in devoting ourselves to solving our community problems on the community level and our united efforts thereby will achieve solution to national problems.

Mrs. English urged auxiliaries to test all their programs on the basis of purpose, and pointed out that understanding grows from knowledge. Enthusiasm is the magic between success and failure.

"Speaking Up for Medicine" was the subject of a program presented by the Communications Division of the AMA. I, personally, felt they chose the wrong title, and it should have read, "Speaking Up for AMERICA." I do not think our battle on federal health legislation will achieve success because we are fighting for freedom for the medical profession, but rather because we are fighting for freedom for all Americans.

What power do we have as an Auxiliary to influence for good the welfare of our country? With a membership of more than 92,000 women our power can be tremendous. In A.M.E.F. this year our united auxiliary contributions amounted to $195,000. Our power becomes limitless when we are able to extend our ideals to other groups and our Auxiliary success lies in our ability to communicate, and not just to know.

It was a pleasure to report the achievements of our Auxiliary under the splendid leadership of Ruth Kelling. She summed up the best of all of her year as, "The joy of working together and playing together—doctors' wives united in sympathy, and interest, with common goals to further the Medical Association's efforts and ideals."

It was interesting to hear what other auxiliaries are doing. Alaska now has two auxiliaries with a membership of 49 women. They have financed a scholarship this year. The Colorado Auxiliary devoted great effort on Operation Coffee Cup, and one member alone gave fourteen coffees. In Hawaii they are publishing biographies of all the physicians who have ever practiced in the Islands. In Montana tape recording interviews with senior citizens regarding what they felt as their greatest problems, gave much insight to state planning. In Nevada the A.M.E.F. contribution averaged $61 a member. Utah aided in a blood donor typing and listing. Alabama went all out for health careers, and one Auxiliary with thirteen members enlisted twenty girls for nurses training. In Georgia community service included working with the golden age clubs, visiting in nursing homes, aiding in a drivers' test program. North Carolina has four endowments totalling $42,000 and supports a patient in each of the four state sanatoriums. Texas sponsored 10,000 science fair exhibits and contributed $1,500 to the library fund from a cookbook project. Kansas celebrated 100 years of progress as a state with Auxiliary efforts devoted to the "New Frontiers." Delaware is coordinating its health career scholarship loan program with other organizations, thereby increasing numbers and amounts. Rhode Island has sponsored radio and television panels explaining Auxiliary work and purpose.

In the tiresome Madison Avenue vernacular we were told it was very important the "image" we create as doctors' wives. We were told we must understand communication and projection if we were to get our message across to others. If we apply the purpose and deed test and analysis to our efforts, I think we will be happy to discover our Auxiliary members are a rather wonderful, generous and dedicated group of women. I do not think this is conceit, it is just the truth. I like our Image, don't you? But like our figures, we'll only keep it, as long as we work at it. So keep up the good work!

Volume 58, Number 8—August, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Tranquilizers in the 1960's

The types of patients for whom tranquilizers are recommended, the period of time they should be continued before either the patient or the physician becomes discouraged, and the superiority of one compound as compared to another—areas not yet dulled by general agreement—are considered. Also, the present age of "lost tranquility" is noted briefly.

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This presentation was made at the 103rd Annual Session of the Missouri State Medical Association, Kansas City, on March 20, 1960.

In 1961 one has to strain to call the "tranquilizers" new—in fact discussing these compounds at this date is a little like the man being ridden out of town on the rail who remarked that except for the honor of the thing he'd just as soon walk.

Before considering the drugs, let me briefly mention this tranquility which is being lost in epidemic proportions.

Tranquility may well be considered a composed, serene state in which the individual is awake. It is advised in the older but seldom recommended or found in children.

This is more an anxious than a tranquil age. Our composure in the present is continuously interrupted by concern over the future. Security is at best brief; and the possibility of sickness, misfortune or our own demise prevents tranquility becoming more than a transitory state.

As frequently happens the first treatment found effective in relieving a disturbed state becomes the drug of choice; and so it has been with the tranquilizers. Alcohol made primitive man calm, composed and serene to the point of stupor centuries before he suspected the phenothiazines might have derivatives.

The non-tranquil are anxious, and anxiety is well defined as that "harmful mental state concerned with harm to come." It might be presumed that before the tranquilizers these same types of patients received barbiturates, and before 1900 chloral hydrate or the bromides.

The tranquilizers have been on the market for more than six years and have been given to several million people in this country alone—but oddly enough there is still some discord as to the most desirable dosage, how long they should be given and how specific they are.

There are two or three apparent reasons for this discord: first the tranquilizers (most of which are phenothiazine derivatives) have such a variety of actions. They quiet the disturbed, cause the virtuous to lactate, produce Parkinsonism in the young and occasionally cause seizures. Unlike the sedatives, these compounds do not cause ataxia (although the patient may literally fall down in a hypotensive faint), they do not produce anesthesia, excitement or any pronounced tendency to addiction. They also differ from sedatives in that they increase muscle tone and lower the seizure threshold.

The second reason for discord regarding these compounds is that their actions are not immediate—like pregnancy there may be quite an interval between administration and effect, and if several are given it is difficult to say which one caused the trouble.

Finally, the biggest problem in evaluating these drugs is in accurately measuring their effects. The only measure there is is a change in the patient's behavior and mood. Judging the efficacy of these compounds in the mentally ill is not unlike evaluating streptomycin in pulmonary tuberculosis without the use of x-ray—and relying on the patient's appearance, weight gain and general state to decide whether the disease is arrested. The more advanced the tuberculosis the more apparent the improvement or the failure; similarly in the mentally ill, the more disturbed the patient, the more evident the results.

But if the pulmonary lesion were minimal or if the emotionally ill patient is only mildly anxious, the problem of evaluation is not so simple.

Measures and methods in psychiatry are primarily empirical, granted psychology has presented various tests, several thousand of them in fact; but until the present, results are not burdened with exactness.

In deciding which tranquilizer to use the same general rules apply to these compounds that are fitting to other non-specific remedies. The drug in which the physician has the most confidence, and the active compound with the fewest side effects is the most desirable.

Since these preparations control symptoms rather than cure, they should be given according to the duration of the illness. Some patients are briefly upset, others have episodic disturbances and too many become chronically ill. In the acutely ill out-patient the dosage should be reduced or the tranquilizer should be discontinued in from six to eight weeks. This interval is arbitrarily chosen, because the patient will usually discontinue the medication anyway after this interval of time. Or the patient may be told to take the drug only if he is uncomfortable.

If the patient has an episode of anxiety every year or so, then he may be given a tranquilizer during the episode; and it may be discontinued when he recovers. There is no reason to give the drug for three or four years on the presumption he might again become ill.

Finally, the chronic patient may need these medicines over a period of months or years.

As to dosage with these drugs it varies widely with the individual. It seems reasonable to begin with the lowest recommended dosage and increase it weekly until improvement occurs, side effects develop or the maximum dose is reached.

If improvement is not evident in from four to six weeks then there is no need to continue to give the preparation. In my own experience if a patient does not respond to one active tranquilizer, he probably will not respond to a similar compound. In other words, if the patient has had an adequate trial on this type of medication and does not improve, there is little need to try him on five or six more similar preparations with different names.

The most concerning side effect, of course, is agranulocytosis which is reason for discontinuing the drug. Other side effects are usually controllable with a reduced dosage.

There are possibly two hazards peculiar to these drugs as opposed to other medications: these hazards result from the good and the bad effects of suggestion.

Since the measure of efficacy depends on the out-patient's subjective response, the patient may be markedly improved for a brief period because of her enthusiasm over receiving a new medicine. This transitory change may not be related to an action of the drug, and before long the patient's enthusiasm wanes, and the tranquilizer is "no good." She wants another new one that a friend told her about.

On the other hand, a suggestable patient may be incapacitated by a minor side effect such as a dry mouth or a stuffy nose. These complications may occur before enough of the drug is taken to have a beneficial effect. But one such patient can complain so vigorously that it will be a long time before the physician prescribes the drug again.

Two examples of how this works: disulfiram occasionally produces impotence in the alcoholic (not nearly as often as alcohol but that's a different story); but if one tells a man a drug may make him impotent, he'll fail sexually before he even gets around to taking a pill. I had a 250 pound house painter, who averaged a fifth of whiskey a day "so the lead in the paint wouldn't bother him," and after three weeks on disulfiram, he said "I ain't drinkin' but I'm 'de-horned.'" He was told to keep taking his pills, that this too would pass, to which he replied, "I hope so, right now I'm standing around like a gelding at breeding time."

As a second example, we were doing a double blind study using identically appearing capsules, on a continuous treatment ward of a state hospital. The drug being tested was known to produce nausea and vomiting in some patients. Thirteen of the 50 patients being treated had this symptom. When the study was over it was found that seven of the patients who vomited had been on placebo and six had been on the active preparation.

Suggestion is particularly potent in the anxious patient whether he gets a drug or not. For instance, one examines a man who is worried about his blood pressure, and finds he is in good health—but as he is leaving the office you say "take it easy." That does it! Because, as often as not, the anxious patient thinks that you found something too bad to tell him. So, he starts worrying all over again.

INDICATIONS

Tranquilizers are indicated for the patient who is obviously "nervous," agitated or ill at ease—but only if he is uncomfortable. Too often we presume that those like us are normal and those unlike us are abnormal and therefore need some drug.

It is not usual for a practicing physician who puts in 10 to 14 hours a day to tell patient after patient to "slow down" and not work so hard. Now, this is sound advice if given for physical reasons: but if the patient is happy and somatically sound let him work. He does not need a tranquilizer.

Emotionally, it does not matter if the patient skips breakfast, and exists on a diet of fat meat and country butter and sleeps standing up—if he is comfortable and happy, he is better unmolested.

On the other hand, a patient may eat three well balanced meals a day cooked in Wesson oil, exercise moderately and be compatible with his own wife—and still be so anxious he cannot read a newspaper for fear he will see an article about somebody dying with a coronary occlusion. He needs a tranquilizer.

In addition to the patient who is obviously uncomfortable, many make a great effort to conceal their anxiety which may only be revealed by a wet palm, a fast heart or sighing respiration.

Possibly one of the more beneficial properties the tranquilizers have depends on the manner in which they are given.

In the first place, one of the best adjuncts to tranquilizers is the reassurance a thorough physical examination offers—provided you do not shake your head, or look puzzled, concerned or worried while listening to the heart sounds.

Second, patients do not become intellectually ill, they become emotionally ill. The briefer any rational explanation is the better.

In the third place, and this is contrary to prevailing psychiatric theory, patients do not just hate their mother—they also hate their mother-in-law, their employer and the idea of dying. It is wise to ask a few questions about these possibilities; because as mundane as it may seem, all of human existence is not genital and conflicts do arise in other areas.

A careful unsympathetic evaluation of a patient is a great help in predicting what one can expect from a tranquilizer. These compounds do not make the dull bright nor the unhappy euphoric; but they will decrease the patient's unhappy response to irritation whether the conflict is within or arises primarily from without. If you expect more than the patient can give, then you are both likely to be disappointed.

As a rule of thumb, obvious advice is best left unoffered.

For example, a woman says all her trouble results from being unhappily married for 20 years. Unless she's defective, she has undoubtedly thought of divorce at least 19 years before she is seen. However, if divorce is suggested as a solution, it will certainly be more effective if given with a tranquilizer.

Or the 40 year old male alcoholic who is still living at home because he cannot decide on a career, is not the patient to be told to "move out." Treat him but leave him where he is.

Finally, a woman who says she has been married 30 years and there has never been a cross word between her and her husband—implies that one partner is unusually tolerant, chronically anxious or a deaf mute.

One closing point, it is often said we need tranquilizers because of the fast pace at which we live, the H-bomb or 5 o'clock traffic. This seems highly unlikely.

Judging from the number of coffee breaks taken, the pace at which we live could only be called fast by a terrapin. Actually, too much leisure and too much material security gives a human more time to consider himself; and this is not always too reassuring. But if a patient is worried and wants to talk about it, he may have an awful time getting someone to listen to him—without offering advice. Therefore, it is always wise to hear the story—before giving the medication.

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Spontaneous Esophago-Bronchial Fistula Formation Surgically Treated In a 90 Year-Old Woman

Report of Case With Six Year Follow Up

A case of successful surgical treatment of an esophago-bronchial fistula in a 90-year-old woman is reported. Factors responsible for nonmalignant fistula formation are discussed and the need for use of a nonirritating contrast medium is stressed.

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SUCCESSFUL SURGICAL REPAIR of a spontaneous, benign esophago-bronchial fistula was accomplished in a 90-year-old woman suffering from generalized arteriosclerosis and coronary artery disease. Spontaneous fistula formation of this type is extremely rare[1] in the absence of predisposing factors such as trauma, diverticulae, infection or malignancy. It is believed that this is the oldest patient on record on whom successful surgery for a lesion of this type has been undertaken.

CASE REPORT

A 90-year-old white woman was admitted to the University Hospital on July 14, 1955 three hours after a sudden onset of dysphagia. Her past history included a myocardial infarction six years earlier. Progressive mental deterioration with frequent episodes suggestive of "little strokes" had been observed for two years. Seven months earlier the patient had been hospitalized with signs of congestive heart failure and improved considerably following digitalization. She was started on prednisolone, 5 mg. t.i.d. to relieve severe arthritic pain in multiple small joints two months prior to her present illness and this medication was continued in lower dosage because a striking improvement in her feeling of well-being, general strength and mental functioning was noted. For two and one half years the patient had experienced occasional brief attacks of "choking" with inability to swallow which were relieved by "spitting up." These episodes lasted only a few minutes each with no dysphagia noted at any other time.

On the day of admission, during supper, the patient suddenly became unable to swallow solids or fluids and, on attempting to do so, coughed, gagged and regurgitated. She was seen at home by one of us (J. H. W.) and immediate hospitalization was arranged.

Acute esophageal obstruction, possibly by a bolus of food or by a foreign body, was suspected. Fluoroscopic examination was done immediately. Because of the danger of aspiration, Lipiodol® was used as a contrast medium. On swallowing, it was seen to pass into the right main stem bronchus through a narrow tract at the lower level of the aortic arch and spread into the right middle and lower lobe areas (fig. 1). The esophagus appeared somewhat

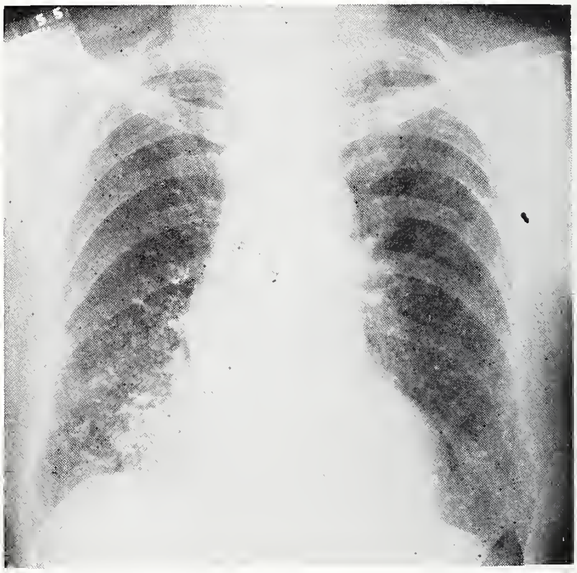
Fig. 1. Roentgenogram demonstrating Lipiodol® in right middle and lower lobes.

narrowed at the level of the fistula but nothing suggestive of malignancy was seen.

Since the patient's condition seemed to be deteriorating, an exploratory right thoracotomy was performed on the following day. Diethylether-oxygen anesthesia with nitrous oxide-oxygen and sodium pentothal induction was used. Exploration failed to reveal any signs of malignancy. There were no remarkable pleural adhesions nor were there gross indications of inflammation or perforation. The lungs expanded freely. The esophagus was exposed in its entire length, and in so doing the small, fistulous tract was torn. The esophagus appeared denuded to the mucosa at that point. This area was overlaid with 000 silk sutures. Exploration of the lungs was unrewarding. The exact site of the fistula on the bronchial side of the lesion could not be demonstrated.

The patient tolerated the procedure well and was released from the hospital eight days later following an uneventful recovery.

Nearly six years later, the patient, now 96 years old, is in fair health doing occasional light house work. She is maintaining good cardiac compensation on digitalis.

DISCUSSION

The etiology of esophago-bronchial fistula is frequently not obvious at the time this dire emergency arises. In a series of 93 acquired, nonmalignant fistulae collections by Coleman[3] 31 were ascribed to trauma; esophageal tuberculosis and diverticulae accounted for 14 each; syphilis was thought to be responsible for 13; and empyema and actinomycosis for one each. However, no etiologic factors were noted in 19 of the cases studied.

Cancerous etiology of fistula formation may be established with a reasonable degree of certainty in most cases, in which a malignancy is responsible, by radiologic examination.

We were unable in a search of the literature to establish any definite relationship between esophago-bronchial fistula formation and preceding administration of corticosteroids. Although perforation of (silent) peptic ulcers (which are themselves possibly precipitated by corticosteroid therapy) is not uncommon, such an ulcer in a high esophageal location would be most unlikely. While the interference of corticosteroids with normal healing processes seems well documented,[1, 2, 5, 6] the formation of a fistula between the esophagus and the bronchial tree must presuppose the formation of esophago-bronchial adhesions through which a distinct fistulous tract would form. In the absence of such adhesions, perforation of the esophagus would result in diffuse contamination of the mediastinal spaces.

The etiology of the fistula in this case seems obscure. Most likely there may have been formation of a very small traction diverticulum in which a foreign body may have lodged. This speculation would postulate the formation of a well-localized abscess which would gradually burrow its way into the bronchial tree.

The purpose of the present report is to emphasize the need to employ nonirritating contrast media for x-ray examination whenever aspiration into the respiratory tract appears likely or possible, and the feasibility of emergency surgery for the relief of this life-threatening condition even in aged, poor-risk patients.

The presence of the attending physician may prevent the otherwise routine use of barium sulfate in x-ray examination of the esophagus by a radiologist not aware of the danger or aspiration in a particular case. Barium sulfate aspirated into a portion of the respiratory tree may not only permanently preclude functional effectiveness of a portion of the lung but also lead to formation of granulomata and lung abscesses.

Lipiodol® is an effective contrast medium which, however, enjoys only a low degree of acceptability to the alert patient because of its taste. It was used successfully in our case. However, the more recently developed, water-soluble, Gastrografin® now appears to be the radiographic contrast medium of choice.

Published large series of cases of esophago-bronchial fistula formation emphasize the extremely poor prognosis with conservative management.

Terracol and Sweet in "Diseases of the Esophagus"[7] quote Barrut's series of 104 conservatively managed cases which showed a mortality of 88 per cent.

Coleman[3] recorded a somewhat better result of conservative management with a 59 per cent mortality in 27 cases; however, only 11.4 per cent of 35 surgically treated patients died, with another 11.4 per cent remaining unimproved.

While in occasional instances spontaneous closure of the fistulous tract may occur, the odds appear heavily weighted against any patient, particularly the aged one, to survive such a condition.

The improved surgical and anesthetic technics at the present time fully justify a surgical approach in all cases in which the patient is not moribund due to unrelated conditions.

SUMMARY

Successful surgical treatment of an esophago-bronchial fistula in a 90-year-old woman was

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Primary Mesenteric Vascular Occlusion

PRIMARY mesenteric vascular occlusion remains a serious disease which challenges the skill and knowledge of the surgeon.

First described by Tiedemann[1] in 1843, the first successful intestinal resection for the condition was reported by Elliott[2] in 1895. The most recent collective review was made in 1953 by Mersheimer, who found reports of 212 successful resections in the literature and added five of his own. DeMuth,[3] in a recent collective review of his own cases, attempts to determine the relative importance of various recognized causes of mesenteric vascular occlusion.

The disease has always carried a high mortality. Whittaker and Pemberton[4] in 1938 reported 60 cases from the Mayo Clinic, 16 of which underwent operation and three of whom survived. Even in recent reports the mortality remains high. Urichhio, et al[5] salvaged two patients of 13 upon whom operation was performed. Wilson, et al[6] had two patients survive of a total of 12 cases on whom operation was done. Of 12 patients reported on, Mersheimer, et al[7] report five recoveries.

Eleven cases of primary mesenteric vascular occlusion, herein presented, represent our total experience with the disease over a period of 12½ years. There were 233,268 admissions to our Clinic in that time, an incidence of .000046 per cent. Nine of these cases were operated on, with resection and end-to-end anastomosis, with eight recoveries. Cases 8 and 10 were not operated upon but were confirmed by autopsy. The ratio of operations on primary mesenteric vascular thrombosis to major surgical procedures of our Clinic was .0012 per cent. The mortality rate of the patients operated on was 12 per cent; recovery rate of all patients seen was 72 per cent. There were seven males and four females in our series. Age range was from 33 to 77, with an average of 64 years. The follow-up period was from three months to 10 years. This compares with similar incidence of admissions to the Rhode Island Hospital reported by Urichhio, but is lower than the .02 per cent of admissions to the Massachusetts General Hospital reported by Warren[8] and Eberhard and the same incidence of admissions reported to the Boston City Hospital by Roby.[9]

Mesenteric vascular occlusion may be due to thrombosis of mesentery veins, embolism or thrombosis of the mesenteric arteries and possibly by spasm of the mesenteric arteries, rupture of the mesenteric vessels or trauma to the

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FISTULA—Continued

accomplished with survival of the patient almost six years later at the time of this report. The various factors responsible for nonmalignant fistula formation are discussed and the possible role of corticosteroids is considered.

In view of a 59 to 88 per cent mortality rate recorded in conservatively treated cases and an 11.4 per cent mortality rate in surgically treated cases, the desirability of surgical treatment in even the poor-risk patient is emphasized. The fact that successful surgery of this type can be accomplished even in a very aged patient presenting an extremely poor risk because of extensive cardiovascular disease is illustrated by this case. It is thought to involve the oldest patient undergoing successful surgical treatment for this condition recorded to date.

A plea is made for the use of a nonirritating contrast medium, such as Lipiodol® or Gastrografin®, rather than routine use of barium sulfate for x-ray studies in all cases in which there is any likelihood of aspiration into the respiratory tree.

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Eleven cases of primary mesenteric vascular occlusion, seven of which had previously been reported, are discussed, including possible origin, findings, diagnosis and treatment.

Drs. Knepper, McDaniel and Stallard are from the Surgical Department, and Dr. Thompson from the Medical Department of the Thompson, Brumm & Knepper Clinic.

mesenteric vessels. Shackelford^{10} reports an incidence of 90 per cent of the superior mesenteric artery as compared to 10 per cent of the inferior mesenteric artery. Superior mesenteric vessels have no collaterals. In our series, we have had no cases of the inferior mesenteric artery or vein being involved. Collateral circulation is present with inferior mesenteric vessels. In our report we have not included cases due to strangulation of the bowel, adhesions or hernia. It may be difficult to discover the cause, even when the resected operative specimen is examined. On postmortem examination the pathologist is more able to determine whether it is artery or vein and thrombosis or embolism. For that reason we have not tried to differentiate thrombosis or embolism, arteries or veins, in our series, but have used only the inclusive term of "primary mesenteric vascular occlusion."

SEX AGE

PATIENT	1	2	3	4	5	6	7	8	9	10	11
SEX	Male	Male	Male	Female	Female	Female	Male	Male	Female	Male	Male
	Seven Males								Four Females		
AGE	74	77	33	71	69	69	57	61	60	72	58
	Average 64										

Fig. 1. Age and sex of 11 patients.

Interesting discussion as to the etiology of primary mesenteric vascular occlusion should include such problems as portal hypertension, arteriosclerosis of the vascular tree, peri-arteritis nodosa, Buerger's disease, or syphilis. None of these were found in our series of 11 cases. One had severe cardiovascular hypertension disease. This patient succumbed in the immediate postoperative period. Five of the six patients had no history of previous disease. Prior surgery on the patients was interesting in that there had been one hernia repair, two cholecystectomies, one hysterectomy for fibroids, one transurethral prostatectomy. One patient had a severe rheumatoid arthritis.

FORMER DISEASE FOLLOW UP DISEASE

PATIENT	1	2	3	4	5	6	7	8	9	10	11
FORMER DISEASE	None	Hernia	None	None	Gallbladder	None	Gallbladder cardiovascula	Arthritis	Hysterectomy	Prostate	None
	One only Cardio Vascular Severe Hypertension										
FOLLOW UP DISEASE	None	Prostate Died	Hemorrhoids	Aneurism Iliac	None	None	Died Post-op	Expired	Post-op Obstruction	Expired	None
	No Re-occurrence Thrombosis										

Fig. 2. Former diseases and follow-up diseases of 11 patients.

The follow-up period of three months to 10 years produced more interesting findings in that there was no recurrence in any of the survivors of any type of intravascular clotting, either on an embolic or thrombotic basis. One patient developed a postoperative mechanical obstruction immediately following surgery and was relieved by re-resection, but there was no recurrence of the vascular occlusion. One patient developed an aneurysm of the iliac artery, which was repaired and he is still living two years later. One patient died following a prostate operation and one patient had a hemorrhoid procedure accomplished without complications.

The patients' symptoms on admission are of note in that the only constant finding was abdominal pain. This did not have a typical location but varied from upper, mid, low or generalized abdomen. Ten of the patients had vomited, and four of the patients had passed blood per rectum. There were other findings of a silent abdomen on auscultation. The mild abdominal rigidity or tenderness was out of proportion to the abdominal pain, which was usually quite

SYMPTOMS ON ADMISSION

PATIENT	1	2	3	4	5	6	7	8	9	10	11
ABDOMINAL PAIN	Lower	Mid	Mid	Mid	General	General	Indefinite	General	General	General	Upper
	Location Not Typical										
BLOOD PER Rectum	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No
	Negative Seven								Positive Four		

Fig. 3. Symptoms of 11 patients upon admission.

severe. Temperature varied from normal to one degree of fever.

Symptoms before the patients were seen varied from six hours to 96, with an average of 46. Symptoms were usually inaugurated with abdominal pain in an otherwise normal-appearing patient. There was an average of six hours after admission to hospital before the operation was accomplished. Two of the patients were not operated on and lived from 11 to 13 hours after admission. These patients were in extremis on admission and did not respond to any type of supportive therapy in preparing for surgery. Correct diagnosis was established in cases 8 and 10 before death.

HOURS OF SYMPTOMS HOURS BEFORE SURGERY OR DEATH

PATIENT	1	2	3	4	5	6	7	8	9	10	11
HOURS SYMPTOMS	24	6	72	6	96	72	96	6	24	36	72
	Average 46 Hours										
HOURS BEFORE SURGERY OR DEATH	8	2	6	3	6	2	16	13 Died	3	11 Died	12
	Average 6 Hours										

Fig. 4. Length of time of symptoms and hours before surgery or death.

Preoperative diagnosis was that of mesenteric thrombosis in four, acute appendicitis in two, and small bowel obstruction in five. White blood count varied from 6,000 to 37,500 with an average of 17,700 and may be of some significance.

PRE-OP DIAGNOSIS W B C ADMISSION

PATIENT	1	2	3	4	5	6	7	8	9	10	11
PRE-OP DIAGNOSIS	Intestinal Obstruction	Mesenteric Thrombosis	Intestinal Obstruction	Intestinal Obstruction	Intestinal Obstruction	Intestinal Obstruction	Mesenteric Thrombosis	Mesenteric Thrombosis	Acute Appendix	Mesenteric Thrombosis	Acute Appendix
	4 Mesenteric Thrombosis				2 Appendiditis				5 Obstruction		
ADMISSION W B C	19950	17300	10500	14800	9200	27250	37500	26250	18000	6000	14500
	Average 17700										

Fig. 5. Preoperative diagnosis, and admission white cell count.

The scout film of the abdomen (we mention scout film in preference to other terms of the same because each patient usually had the film taken in several different positions) of which four were normal, three had the diagnosis of small bowel intestinal obstruction, and there was one positive of loss of haustrations in the valvula conniventes, which is said to be diagnostic of vascular occlusion. Three patients did not have a scout film.

SCOUT FILM POST OPERATIVE SMALL BOWEL

PATIENT	1	2	3	4	5	6	7	8	9	10	11
SCOUT FILM	Not Done	Not Done	Neg.	Neg.	Intestinal Obstruction	Intestinal Obstruction	Loss of Haustration	Neg.	Not Done	Intestinal Obstruction	Neg.
	4 Negative			3 Intestinal Obstruction			1 Positive		3 Not Done		
POST OPERATIVE SMALL BOWEL	Normal		Rapid	Rapid	Rapid				Normal		Normal
	3 Normal Function					3 Rapid Function Small Bowel					

Fig. 6. Scout film, and postoperative small bowel function.

In the follow-up period of three months to 10 years, small bowel studies were made. Three of these were normal, three had rapid function of the small bowel, in that the barium would be in the mid-colon within half an hour. The rapid emptying time was in patients with more extensive resection. In other words, the ones who had 75 centimeters or less of small bowel removed usually had normal function. Small segments of the bowel, particularly the ileum, can be removed without postoperative difficulty. An interesting observation is the difference in length of the small bowel in different individuals. Our experience demonstrates that if extensive involvement occurs, the jejunum and ileum are involved, while small portions involve only the ileum.

CENTIMETERS REMOVED PORTION REMOVED

PATIENT	1	2	3	4	5	6	7	8	9	10	11
CENTIMETERS SMALL BOWEL REMOVED	52	96	234	110	72	32	500	Not Operated	45	Not Operated	150
	Average 143 Cm.										
PORTION REMOVED	Ileum	Ileum Jejunum	Ileum Jejunum	Ileum Jejunum	Ileum	Ileum	Ileum Jejunum Right Colon		Ileum		Ileum Jejunum
	4 Ileum		4 Ileum & Jejunum			1 Ileum, Jejunum & Colon					

Fig. 7. Centimeters of small bowel removed per patient.

The use of anticoagulants in the postoperative period had not been exclusive but we now believe that it is mandatory. We believe that further extension of intervascular clotting can be prevented by the intravenous use of Heparin and Warfarin Sodium or Coumadin. Heparin 100 mg., is given at the conclusion of the operation. Varying with the size of the patient, an ordinary adult individual was given 75 mg. of Coumadin. After four to five days, when the patient is taking food by mouth, Coumadin is given and regulated to maintain the prothrombin in the region of 30 to 35 seconds. The patients were given from two to seven transfusions in the immediate postoperative period, with an average of three. Secondary anemia developed in patients who had extensive resection requiring therapy.

ANTI COAGULANT TRANSFUSIONS

PATIENT	1	2	3	4	5	6	7	8	9	10	11
ANTI COAGULANT	Heparin	Heparin Dicumarol	Heparin Dicumarol	Heparin Dicumarol	None	None	Heparin	No Operation	Heparin IV Coumadin	No Operation	Heparin IV Coumadin
TRANSFUSIONS	7	4	3	2	2	2	4	No Operation	2	No Operation	2
	Average 3										

Fig. 8. Anticoagulants and transfusions used.

The hospital stay of the patients who recovered was from 10 to 30 days, with an average of 15 days.

HOSPITAL DAYS FOLLOW UP YEAR'S

PATIENT	1	2	3	4	5	6	7	8	9	10	11
HOSPITAL DAYS	24	30	15	10	13	20	1 Died Post op	Not Operated 13 Hours	15	Not Operated 11 Hours	10
	Average 15										
FOLLOW UP YEARS	10 4-2-48	1 Mo. 12-16-48	7 3-31-51	6 1-11-52	4 7-4-54	4 11-26-54	Died Post op 3-28-56	None 7-1-57	1 8-25-57	None 1-16-58	3 Mo. 6-20-58

Fig. 9. Hospital stay and number of follow-up years.

The nutritional status after resection of parts of the small bowel depends, in the main, upon the amount of small bowel remaining, although there is, no doubt, considerable variation in individual adaptability. How much should remain, to avoid all nutritional difficulties, is not known. The small bowel, because of its inaccessibility and relative freedom from disease, has not been as thoroughly studied as its approaches above and below. Haymond stated in 1935: "If the patient survives the operation, the loss of one third of the small bowel should permit a return to normal; resection of one half is the upper limit of safety, while greater amounts give poorer results even though an exceptional case may be better than predicted."

Immediately postoperatively the problem of overshadowing importance is the management of fluid and electrolyte depletion. With the return of intestinal motility, profuse diarrhea develops with its attendant tenesmus, burning and perianal irritation and even excoriation. The volume of fluid loss may be enormous, and requires careful measurement and frequent determination of sodium, chloride and potassium. This phase may last two or three weeks.

Adaptation brings with it decreased transit time and improved function. In Althausen's case[10] the passage of food from mouth to anus changed from three and one half hours on the ninth postoperative day to 18 hours at three weeks. Postmortem studies following massive small bowel resection have shown dilation of the remaining portion and redundancy of the mucous membrane, suggesting hypertrophy. The colon enlarges and probably increases its absorptive capacities for simple carbohydrates and for amino acids. The presence of a segment of ileum, the ileocecal valve, and as much of the colon as possible appears to be a decided advantage.[13, 14, 15]

Fat absorption is most seriously affected. Normally, 90 to 95 per cent of ingested fat is absorbed, probably chiefly from the ileum. Borgstrom, Dahlquist, Lundh and Sjovall studied small bowel absorption in normal human beings, 16 to 40 years of age, employing a test meal of corn oil, glucose plus lactose and milk proteins.[16] They found that absorption begins in the duodenum and is completed in the proximal 100 centimeters of jejunum, more proximal for fat than for carbohydrate, and more proximal for carbohydrate than for protein. However, with the use of an ordinary diet and with other factors resultant from resection of large quantities of small intestine, these findings are, no doubt, inapplicable.

The pH of the bowel in postoperative cases was found to be 3.5 to 6.0 while lipase (and trypsin also) has scarcely any activity below pH 8.[14] This acidity is thought to be due to the relative lack of alkaline pancreatic juice and succus entericus. The decrease is readily understandable in the latter. The diminution of pancreatic juice may be due to a deficiency of secretin and pancreozymin, which are secreted by the small intestine to stimulate pancreatic activity. Atrophy of the pancreas has been noted in autopsy studies following extensive small intestinal resection. Whatever the reason, the result is a diminution of pancreatic enzymes, together with an unfavorable environment for that which is secreted.[18]

Those substances which depend upon normal fat assimilation for adequate absorption, notably vitamins A, D and K, and calcium and phosphorus, of course, require special attention after extensive intestinal resection. In addition, disordered fat absorption may be accompanied by poor absorption of the vitamins of the B complex, vitamin C, and protein. Vitamin B_{12}, which is absorbed from the lower ileum,[14] may not be absorbed at all.

Protein absorption is less affected than that of fat, although increasing the fat intake decreases protein absorption. Powers of recovery to absorb protein do exist—in one case, from 17 per cent initially to 88 per cent finally, by methionine tolerance test.[10] This may be due, in part, to the demonstrable ability of the colon to absorb amino acids and the higher split products of casein hydrolysis.

Carbohydrate (and water) absorption is least affected and recovers the soonest. There may be some difficulty with starches, since they may be in the colon before hydrolysis is complete, and bacterial action there may contribute to the gaseousness which is sometimes a complaint.

The maintenance diet, therefore, of a patient who has had a massive small bowel resection should be excessive in calories (3,000 or more), high in carbohydrate, moderately high in protein, and low in fat. Starches should be avoided. The feedings in the early postoperative period should be frequent, and later tailored to suit the individual patient's desires. Attempts to enforce a rigid regimen may result in a discouraged patient and resultant dietary indiscretions. Dairy fat may be permitted to tolerance. Usually this will not be much. Vitamins A, B complex, C, D, and occasionally K, are needed in excess, sometimes by injection. Added calcium and iron may be needed at times, although tetany and anemia are infrequent. In spite of the fact that Vitamin B_{12} is apparently poorly absorbed, macrocytic anemia is extremely rare, in contrast to other small bowel syndromes. Probably this is because of the presence of at least a small amount of normal small bowel, which is not the case with sprue and idiopathic steatorrhea.[18]

SUMMARY

Eleven cases of primary mesenteric vascular occlusion, seven[12] of which have been reported previously, are now compiled and the following conclusions presented:

1. This disease in our series is primary in origin and is not connected with previous vascular and cardiac disease, with one exception (Case 7).
2. Follow-up periods of up to 11 years reveal no recurrences of the disease in those who had surgery.
3. We believe anticoagulants in the immediate postoperative period are mandatory.
4. We have been unable to differentiate arterial from venous and thrombosis from embolism in the pathologic process.
5. Overall recovery rate was 72 per cent.

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Progress in the Field of Pediatric Allergy

Recent advancement in the treatment of allergic conditions, especially in children is discussed, together with comparisons of some preparations now in use.

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UNDERSTANDING OF allergies is improving. Although the mechanism or mechanisms underlying the various clinical allergic manifestations are not clearly understood, it has been learned that allergy is not confined to hay fever, asthma and various dermatologic phenomena. Clinical observation, planned experiments and the application of the varied hypotheses regarding the mechanisms of allergic response have broadened the field to include such varied and seemingly unrelated disorders of the immune mechanism as the "postinfection" and vaccination encephalitides, exanthematous reactions in bacterial infections, idiopathic thrombocytopenic purpura, acquired hemolytic anemia, anaphylactic purpura, erythema nodosum and the various diseases of the collagen tissues.

Research is actively being conducted in this area and should increase knowledge of diseases due to alterations of the immune mechanisms.[1-11]

New antihistamines claimed to possess none or fewer of the disadvantages of the earlier known ones are now available. Only time, widespread use, controlled studies and personal experience will show how far these claims are true and if the drugs cause any untoward effects. The release of histamine is only one of the mechanisms for the production of allergic symptoms. For this reason antihistamines alone cannot relieve all symptoms of allergy. While they are potent in controlling hay fever and urticaria, they often fail to offer relief to the asthmatic. The interaction of reagin and allergin effects the mast cells and basophils with the liberation of histamine, serotonin, heparin and acetylcholine. This has an implication in the therapy of allergies. Antihistamines cannot be expected to give relief to patients in whom the symptoms are the effect of substances other than histamine.

The indications for the use of adrenal steroids in the therapy of allergic persons will undoubtedly remain a controversial subject for some time. An outline of our practices may be useful even though individualization in handling patients is always necessary and one must keep in mind the pharmacologic effects and dangers of steroid therapy.

We have not found the use of steroids helpful in the treatment of infants and children with gastrointestinal allergies. Symptoms in children with nasal allergy can be controlled in almost all cases with antihistamines and decongestants without the necessity of using steroids for palliation. Local steroid therapy for a short period may be indicated for patients with cutaneous allergies to enhance clearance of the manifestations while more specific treatment is instituted. Occasionally one comes across a case of generalized infantile eczema that deserves oral or parenteral therapy for a short while as well as local steroid therapy. It is in the field of the treatment of children with asthma that steroids are most useful.

There is almost universal agreement that steroids are helpful and needed by patients in status asthmaticus. Large doses may be required and can be given with parenteral fluids (60 mg. of hydrocortisone per square meter of body surface per day). For maintenance therapy a dose up to 5 mg. of prednisone, prednisolone or methyl prednisolone per square meter of body surface per day may be necessary for patients who would otherwise develop irreparable damage of the bronchial tree and lungs. This dosage rarely produces undesirable side effects and in conjunction with other palliative measures is enough to control the symptoms and protect, delay or minimize permanent untoward changes viz: emphysema and bronchiectasis. It should be kept in mind always that steroid therapy is symptomatic and palliative and cannot be relied upon solely for control of allergic manifestations.

Newer steroids having proportionately more glucocorticoid and anti-inflammatory effects than hypertensive and sodium retention action are now in use. Methyl prednisolone, triamcinolone and dexamethasone are now being used in conjunction with bronchodilator drugs in the maintenance nonspecific therapy of some allergies, notably asthma, with good results.

Van Metre[12] observed that cortisone is less than one tenth as potent as a growth inhibitor as the newer steroids. One of the means by which a steroid can suppress growth is by stimulating gluconeogenesis. Suppression of linear growth is more related to the gluconeogenic property than to the other properties of a steroid. Triamcinolone was observed to produce muscle damage.[13] This Triamcinolone myopathy was not produced by prednisone given in equivalent glucocorticoid doses.

These side effects and the dissociation of modes of action among the known steroids shows that the pharmacologic effects of these substances are not inseparable and gives hope that eventually there can be developed steroids with enhancement of one specific function and diminution of side effects.

The effectiveness of salicylates in the maintenance therapy of allergies, notably infantile atopic dermatitis was confirmed by Debre.[15] Guzhienko and Chekodanova have revived their use.[16] Large doses of sodium salicylate (0.1 gm. per Kg. body weight per day) similar to those advocated for treatment of acute rheumatic fever are required. It is most probable that they act by increasing ACTH production. Attention to water intake is necessary to avoid salicylate intoxication.

Hyposensitization by injections of allergenic extracts is still a tedious and lengthy procedure though helpful in the management of pollen allergies. Attempts to find some way of obviating the necessity for repeated injections have not met with much success. "One Shot" hyposensitization by the use of oil respository emulsions of allergen extracts[17] have not had wide acceptance since the antigens have been shown to be released quite irregularly. The development of sodium alignate mixtures with allergens for use in single ejection hyposensitization also is still in the experimental stage.[18]

The improper use of drugs in the treatment of asthma in children can be dangerous.[19] The toxic effects of aminophyllin, antihistamines and steroids can be more serious than asthma itself. Failure of the child to respond to a given therapeutic approach should direct the physician to use complementary lines of therapy rather than to repeat or increase to toxic levels the dose of a given drug.

With progress in the study of the basic mechanisms of this group of diseases and the development of newer chemicals and hormones the discovery of improved means by which allergic reactions can be prevented or better controlled can be anticipated.

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STRAIN

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SEARLE

J. LOREN WASHBURN, M.D., ***Versailles***

A.M.A. Annual Session

A Special Article

Proceedings of the House of Delegates and the session of the AMA held in New York, June 26 to 30, 1961, with Missouri Delegates Durward G. Hall, M.D., Springfield; J. Loren Washburn, M.D., Versailles; Richard H. Kiene, M.D., Kansas City; A. W. Nielson, M.D., St. Louis, are reported.

MISSOURI DELEGATES to the AMA, Durward G. Hall, M.D., Richard H. Kiene, M.D., A. W. Neilson, M.D., and J. Loren Washburn, M.D., attended the meeting in New York June 26-June 30, 1961. Alternate Delegate Rolla B. Wray, M.D., and former Alternate Delegate William J. Shaw, Sr., were in attendance. Alphonse McMahon, M.D., member of the Council on Scientific Assembly of the AMA and Delegate from the section on Military Medicine; Milton B. Casebolt, M.D., Alternate Delegate, Section on General Practice; J. H. Summers, M.D., President, Missouri State Medical Association; Doyle C. McCraw, M.D., Councilor of the Eighth District; Ray McIntyre of the MSMA staff; John R. Buckner, Executive Director of the Greene County Medical Society; Hollister S. Smith, Executive Secretary of St. Louis Medical Society, were among others from Missouri present.

Richard H. Kiene, M.D., served as a member of the Reference Committee on Miscellaneous Business. This committee considered several controversial items, and spent many hours in hearing both sides of the many issues referred to it and in presenting its well considered recommendation to the House. Delegate Durward Hall, Congressman from Missouri's 7th District, was one of the principal speakers on Sunday afternoon, June 25, at the Annual State Officers Conference. He gave a most informative and inspiring talk concerning the insidious promotion of socialism in this country.

Osteopathy, medical discipline, communications, surgical assistants, drug legislation, general practice residences, relations with allied health professions and services, and poliomyelitis vaccine were among the major subjects covered by 115 resolutions and 28 reports acted upon by the House of Delegates at the American Medical Association's 110th Annual Meeting.

Dr. George M. Fister, Ogden, Utah, member of the AMA Board of Trustees and previously a member of the House of Delegates, was named president-elect of the Association. Dr. Fister will become president at the June, 1962, annual meeting in Chicago, succeeding Dr. Leonard W. Larson, Bismarck, N. D., who assumed office at the Tuesday night inaugural ceremony in New York.

The AMA 1961 Distinguished Service Award was voted to Dr. Walter H. Judd, Minneapolis, physician and member of Congress, for his contributions as a medical missionary, humanitarian and statesman devoted to world peace.

Total registration through Thursday, with half a day of the meeting still remaining, had reached 56,315, including 22,681 physicians.

OSTEOPATHY

In considering a report of the Judicial Council and three resolutions on the subject of osteopathy, the House of Delegates agreed with the intent of the report and resolutions, but instead adopted the following statement of AMA policy:

"1. There can never be an ethical relationship between a doctor of medicine and a cultist, that is, one who does not practice a system of healing founded on a scientific basis.

"2. There can never be a majority party and a minority party in any science. There cannot be two distinct sciences of medicine or two different, yet equally valid, systems of medical practice.

"3. Recognition should be given to the transition presently occurring in osteopathy, which is evidence of an attempt by a significant number of those practicing osteopathic medicine to give their patients scientific medical care. This transition should be encouraged so that the evolutionary process can be expedited.

"4. It is appropriate for the American Medical Association to reappraise its application of policy regarding relationships with doctors of osteopathy, in view of the transition of osteopathy into osteopathic medicine, in view of the fact that the colleges of osteopathy have modeled their curricula after medical schools, in view of the almost complete lack of osteopathic literature and the reliance of osteopaths on and use of medical literature, and in view of the fact that many doctors of osteopathy are no longer practicing osteopathy.

"5. Policy should now be applied individually at state level according to the facts as they exist. Heretofore, this policy has been applied collectively at national level. The test now should be: Does the individual doctor of osteopathy practice osteopathy, or does he in fact practice a method of healing founded on a scientific basis? If he practices osteopathy, he practices a cult system of healing and all voluntary professional associations with him are unethical. If he bases his practice on the same scientific principles as those adhered to by members of the American Medical Association, voluntary professional relationships with him should not be deemed unethical."

Medical Discipline

In a major move designed to strengthen the profession's disciplinary mechanisms, the House approved the conclusions and recommendations of the Medical Disciplinary Committee, with only three word changes. The House discharged the committee with thanks and commendation and directed that its functions be assumed as a continuing activity of the Judicial Council.

One recommendation suggests that "The bylaws of the American Medical Association be changed to confer original jurisdiction on the Association to suspend or revoke the AMA membership of a physician guilty of a violation of the *Principles of Medical Ethics* or the ethical policy of the American Medical Association regardless of whether action has been taken against him at local level."

Another "encourages and urges that each state association report annually to the American Medical Association all major disciplinary actions taken within its jurisdiction during the preceding calendar year."

The report urged state and county medical societies to utilize grievance committees as "grand juries" to initiate action against an offender so as to obviate the necessity of making an individual member of a medical society complain against a fellow member.

The House suggested that each medical school develop and present a required course in ethics and socio-economic principles, and that each state board of medical examiners include questions on ethics and proper socio-economic practices in all examinations for license.

The report concluded with a recommendation that "American medicine at the national, state and local level maintain an active, aggressive and continuing interest in medical disciplinary matters so that, by a demonstration of good faith, medicine will be permitted to continue to discipline its own members when necessary."

Communications

Acting upon four resolutions related to the Association's public relations program, the House adopted a substitute resolution directing the Speaker of the House of Delegates to name seven elected members of the House as a special committee "to study and continually advise the Board of Trustees on the broad planning and coordination of all phases of communications of the American Medical Association, so that the public and the members of the medical profession are properly and adequately advised of the policies and concern of the medical profession with respect to all phases and aspects of medical care for all people."

The House agreed with a reference committee opinion that "we have a very adequate Division within the AMA capable of implementing any program of communications." The approved committee report also said that "the Communications Division of the AMA needs the active support and cooperation of the House and of all members of the Association."

Surgical Assistants

In considering a Board report and two resolutions on the subject of surgical assistant's fees, the House approved the following five basic principles developed by the Judicial Council and the Council on Medical Service:

"1. Each member of the AMA is expected to observe the *Principles of Medical Ethics* in every aspect of his professional practice.

"2. Each doctor engaged in the care of the patient is entitled to compensation commensurate with the value of the services he has personally rendered.

"3. No doctor should bill or be paid for a service which he does not perform; mere referral does not constitute a professional service for which a professional charge should be made or for which a fee may be ethically paid or received.

"4. It is ethically permissible for surgeon to employ other physicians to assist him in the performance of a surgical procedure and to pay a reasonable amount for such assistance.

"This principle applies whether or not an assisting physician is the referring doctor and whether he is on a per case or full time basis. The controlling factor is the status of the assisting physician. If the practice is a subterfuge to split fees or to divide an insurance benefit, or if the physician is not actually employed and used as a bona fide assistant, then the practice is contrary to ethical principles.

"5. Under all other circumstances where services are rendered by more than one physician, each physician should submit his own bill to the patient and be compensated separately."

Efficacy of Drugs

The House strongly endorsed a Board report which pointed out the problems that would result from amending the Food, Drug and Cosmetic Act to authorize the Food and Drug Administration to determine the efficacy, as well as the safety, of a prescription drug prior to the approval of a new drug application. The AMA will oppose such legislation before the Kefauver Committee, the report pointed out, on the basis that "a decision with respect to the effectiveness of drugs is dependent upon extended research, experimentation and usage." The House agreed that vesting such authority in the Food and Drug Administration would operate to limit research, the marketing of drugs and the exercise of discretion by the medical profession. "The marketing of a relatively useless drug is infinitely less serious than would be the arbitrary exclusion from the market of a drug that might have been life saving for many persons," the House declared.

General Practice Residencies

Eight resolutions were introduced on the subject of creating new two-year residency training programs in general practice. The House agreed that there appears to be need for such programs for those individuals who desire more experience in obstetrics and surgery than may be available in the currently existing Family Practice Program. It approved a substitute resolution directing the Council on Medical Education and Hospitals to consider for approval other two-year programs in general practice which incorporate experience in obstetrics and surgery. The Council will review these programs on the basis of their individual merits and conduct a long-range evaluation of the new programs as well as the previously established Family Practice Programs.

Relations With Other Health Professions and Services

The House considered a Board report and twelve resolutions dealing with various aspects of medicine's relationships with allied health professions and services, including optometry. The Board report recommended the creation of a new AMA Council to handle all the problems involved. The House, however, accepted a reference committee suggestion for establishment of a new Commission to Coordinate the Relationships of Medicine with Allied Health Professions and Services. The Commission will be composed of seven members appointed by the Speaker of the House. Subcommittees, composed of from three to five members selected by the Commission from lists of names submitted by scientific sections, will consider problems in specific areas. The Commission will correlate and catalogue the reports of the subcommittees and will act as liaison agent between the subcommittees and those AMA Councils in which there may be overlapping interests.

Polio Vaccine

The House approved a report by the Council on Drugs on the present status of poliomyelitis vaccination in the United States and urged that it be made available to all physicians through the most effective communications media. The report clearly outlines procedures recommended for implementation of mass vaccination with the new oral vaccine when it becomes available. The House complimented the Council on its "clear and succinct statement on the initiation of the new campaign which will be needed to promote the new vaccine." The House agreed that the report provides the practicing physician with a reliable series of answers to the many questions which will arise during the changeover from Salk vaccine to oral vaccine. The report emphasizes, however, that "physicians should encourage, support and extend the use of Salk vaccine on the widest possible scale at least until the oral polio-virus vaccines currently under development and clinical trial become available."

Miscellaneous Actions

In dealing with resolutions and reports on a wide variety of other subjects, the House also:

Approved the *Guides to Physician Relationships With Medical Care Plans,* submitted by the Council on Medical Service, with these two changes: deletion of item 5 under "Responsibilities of the Medical Society," which said "To recognize that properly qualified physicians employed by, or otherwise serving, medical care plans should not be denied professional rights and privileges because of their service to such plans," and addition of a new item 1 under "Responsibilities of the Medical Care Plan," which reads: "To provide the beneficiary of the plan with free choice of qualified physicians";

Reaffirmed its support of the Kerr-Mills program for the needy and near-needy aged and its opposition to any legsislation of the King-Anderson type, declaring that the medical profession "will not be a willing party to implementing any system which we believe to be detrimental to the public welfare";

Approved a markedly expanded drug information program submitted by the Board of Trustees and the Council on Drugs;

Adopted the final report of the Special Study Committee of the Council on Medical Education and Hospitals and recommended that copies be sent to all medical school deans in the United States;

Decided to hold the 1963 Clinical Meeting in Portland, Oregon, instead of Las Vegas, Nevada, as recommended by the Board;

Approved a plan by the new AMA Department of International Health to cooperate in the recruitment of volunteer physicians for emergency medical service in foreign mission fields;

Agreed to an increase of $20 in the annual AMA membership dues to be implemented over a period of two years: $10 on January 1, 1962, and $10 additional on January 1, 1963;

Discontinued the Association's General Practitioner of the Year award;

Opposed legislative and administrative mandates which would compel physicians to prescribe drugs, or require pharmaceuticals to be sold, by generic names only;

Reaffirmed the Association's opposition to compulsory inclusion of physicians under the Social Security system;

Urged immediate legislation that will provide strong economic motivation for the construction of maintenance of fallout shelters;

Disapproved two resolutions which would have discontinued the scientific activities at the Clinical Meeting;

Urged immunization campaigns against both tetanus and influenza, and

Asked state and county medical societies to give full support to the First National Congress on Medical Quackery to be jointly sponsored next October 6-7 in Washington, D. C., by the AMA and the Food and Drug Administration.

OPENING SESSION

At the opening session on Monday, Dr. E. Vincent Askey, Los Angeles, retiring AMA president, challenged physicians and medical organizations to reexamine their own efforts to strengthen and improve medicine, and he warned against defeatism and failure to accept personal responsibility for answering criticisms. Dr. Larson, then president-elect, called on the profession to strengthen methods of self-discipline in both the state and county societies, adding that physicians must be concerned with improper or incompetent practice and unethical actions of all kinds. The 1961 Goldberger Award in Clinical Nutrition was presented to Dr. Frederick J. Stare, chairman of the Department of Nutrition at Harvard Medical School.

INAUGURAL CEREMONY

Dr. Larson, in his inaugural address Tuesday night, said that the really good doctor, guided by the professional spirit, will always remember that medicine exists for just one purpose—to serve humanity. When the essence of that spirit is diluted or destroyed, either in an individual physician or in a nation, he added, medicine cease to be a profession in the highest sense of the word. Dr. Larson also presented the Distinguished Service Award medal to Representative Judd. Entertainment highlight of the inaugural program was a concert by the Montgomery County Medical Society Glee Club of Dayton, Ohio.

ELECTIONS OF OFFICERS

In addition to Dr. Fister, the new president-elect, the following officers were named at the Thursday session:

Dr. Eustace A. Allen, Atlanta, Ga., vice president; Dr. Norman A. Welch, Boston, reelected speaker of the House, and Dr. Milford O. Rouse, Dallas, Texas, reelected vice speaker.

Elected to the Board of Trustees were Dr. Wesley W. Hall, Reno, Nev., to succeed Dr. Fister; Dr. Homer L. Pearson, Jr., Miami, Fla., to replace Dr. Julian P. Price, Florence, S. C., and Dr. Charles L. Hudson, Cleveland, Ohio, to fill out the term of the late Dr. Cleon A. Nafe, Indianapolis. The Board named the following officers: chairman, Dr. Hugh Hussey, Washington, D. C.; vice chairman, Dr. Percy Hopkins,

(Continued on page 870)

J. H. Summers, M.D.

President's Message

We have attempted to keep the membership informed on legislative activities by direct communication. In some cases letters have gone to the entire membership; in less important matters, to the presidents of component societies for their transmissal to the membership. We will continue to do this on national issues.

Legislation moves too fast—or in some cases too slow—to give an up-to-date accounting in a monthly publication. Therefore I shall not attempt to discuss the present status of national legislation for hearings on the King-Anderson legislation were scheduled for about the time that this issue will be going to members.

However, whatever the status is at the time of this issue, it is time to communicate with your legislators. If the matter is still unsettled, as it probably will be, letters from you and your friends are needed. If an unfavorable decision has been reached, letters protesting any further such legislation and letters of thanks to the legislators that have stood for medicine and private enterprise are indicated. If a satisfactory decision is reached by the Congress, certainly letters of commendation, wherever possible, are called for. If the present cause is lost, let's try to hold it to no further loss; and if gained, let's take advantage of that to promote more favorable legislation for medicine.

J. H. Summers, M.D.

EDITORIALS

INDIVIDUAL OR ORGANIZATION

It has become almost an axiom that the patient likes and approves of his own family physician but does not like organizations of physicians. At least one interested person found the opposite to be true.

The *New York State Journal of Medicine*, on July 1, reports that the editor of one of the large metropolitan newspapers conducted a private poll. He asked at random of subscribers and friends, "What do you think of doctors?" The publication summarizes the results as follows:

"Surprisingly enough, criticism was directed not particularly to the actions or inactions of organized medicine but to the individual doctor's conduct of his practice. Almost universal were the complaints of lack of a warm, understanding contact with the physician, wholesale referral to specialists, particularly for simple, uncomplicated conditions, and high costs, including hospitalization and drug costs which are largely out of the control of the doctor.

"Numerous were the complaints of inability to get a doctor 'when I want him.' This was not a night call problem but one which happened during the business hours of the day. 'The doctor is not punctual' was often heard. Sad to relate, there was some criticism of an occasional one of our own who loaded on an extra fee to insurance service benefits which had been firmly agreed on.

"There was much praise too for skill and competence. The people like and admire what we do, but they are less than enthusiastic about how we do it.

"The corporate image is the sum total of the individual images. We will look better when we are better.

"Tightening up in extravagances in hospitalization and drug prescribing, closer attention to our patients and a human, holistic approach to their problems, and prudence in referral would please our patients and might not do us a bit of harm as we face into the winds of change."

GROWTH OF HEALTH INSURANCE

Some 132 million Americans—73 per cent of the civilian population—had health insurance at the end of 1960, the Health Insurance Council said in reporting the results of its 15th annual survey on the extent of voluntary health insurance coverage in the United States. The survey is based on reports from insurance companies, Blue Cross-Blue Shield, and other health care plans.

The Council said both the number of persons covered by some form of health insurance and the amount of benefits paid reached new highs last year. Coverage increased by 4.1 million during 1960 to reach a total of 131,962,000 persons.

Benefit payments by all health insuring organizations to help cover the cost of hospital, surgical and medical care amounted in 1960 to more than $4.8 billion, up $500 million over 1959, the report stated. In addition, persons with loss-of-income policies received $839 million in benefits from insurance companies to replace income lost through disability. Thus, a grand total of $5,688,000,000 in health insurance benefits were distributed during 1960, up 10.1 per cent over 1959.

The report stated that based on early trends for 1961, it estimated that as of June 1, 1961, some 134 million persons (74 per cent of the civilian population) had hospital expense insurance, 123 million had surgical expense insurance, 89 million had regular medical expense insurance, 31 million had major medical expense insurance, and 42.5 million were insured against loss of income, or had some other formal sick leave pay arrangement.

The Council said that these figures also revealed the breadth of health insurance protection which Americans have. The organization said that as of June 1, 92 per cent of persons with health insurance had both hospital and surgical expense insurance, and 66 per cent had hospital, surgical and regular medical expense insurance. Five years ago the figures were 85 and 52 per cent respectively.

A breakdown of the number of persons with health insurance at the end of 1960 by type of coverage and type of insuring organization follows: Hospital expense insurance was provided by insurance companies to 78,885,000 persons; by Blue Cross-Blue Shield and similar groups to 58,050,000, and by other health care plans to 5,542,000. After deducting persons protected by more than one type of insuring organization, the Council reported that 131,962,000 persons had hospital insurance, a 3.2 per cent increase over the 127,896,000 persons so covered at the end of 1959.

Ramblings of the Field Secretary

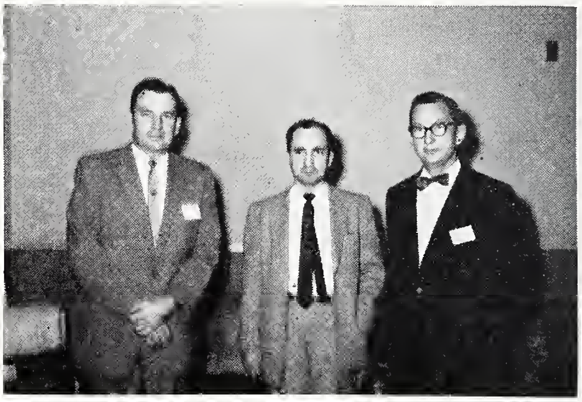
More than 200 doctors, representing all sections of the state, attended the sixth annual Spring Clinical Conference at the University of Missouri Medical Center on May 11-12. The two-day program centered upon "Steroid Therapy" offering a review of basic considerations and the clinical application of this important group of compounds. The faculty included a number of guest physicians from other medical schools along with members of the teaching staff of M. U.

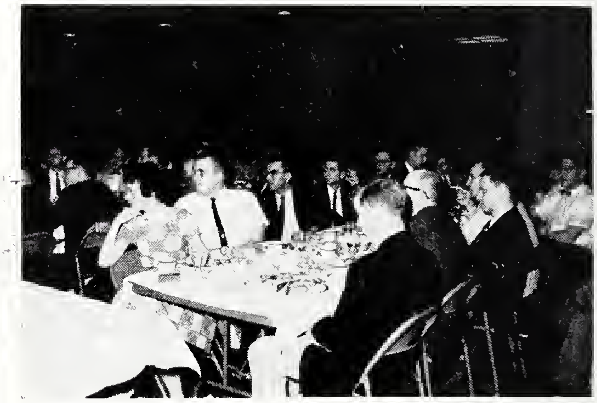
The Medical School Auditorium was filled.

This program is acceptable for ten and one-half hours of Category I Credit by the American Academy of General Practice.

A coffee break at the Conference was used for visiting.

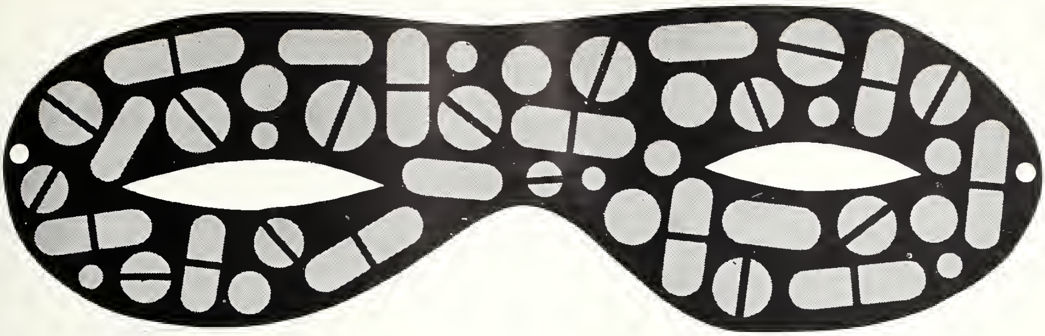
Members of the senior class of the University of Missouri Medical School were guests at a luncheon, May 11, at the Student Union Building in Columbia, given jointly by the Public and Professional Relations Committee of the Missouri Academy of General Practice and the Committee on Rural Medical Service of the Missouri State Medical Association. A short program followed the luncheon. This consisted of brief discussions on the practice of medicine by three physicians in private practice in rural Missouri. These physicians were: B. J. Bass, M.D., solo


Doctors present from Southeast Missouri included Drs. McDonald, Jaeger and Ashley.


Senior medical students exhibited interest in a general practitioner discussion.

Dr. Summers addressed the group. Seated at the head table were Drs. Leitch, Imes, Worley, Bass and Spelman.

(Continued on page 844)



drugs anonymous

One of the several hastily conceived and potentially dangerous suggestions for reducing drug costs is generic-name prescribing. The proponents of generic-name prescribing claim that it will lower drug costs significantly and—through supervision by the Federal Government—provide quality equivalent to that of trademarked drugs. We maintain that these claims are false. Here are some authoritative answers to the principal questions posed by generic-name prescribing.

How much money would be saved if all prescriptions were written for generic-name drugs?

"The [Rhode Island] Division of Public Assistance examined 10,000 drug prescriptions for welfare recipients for the purpose of determining the actual savings . . . of generic versus trade-name drugs. The drugs had cost $28,000. Substituting generic drugs whenever possible would have provided a saving of less than 5 per cent. Syracuse has made a similar study of drug costs with comparable results."

Rhode Island Medical Journal,
January, 1961

Are the savings worth the risk of sacrificing quality?

". . . it is unsafe [to prescribe generically] because there is not sufficient policing of our standards. . . ."

Lloyd C. Miller, Ph. D.
Director of Revision of the U.S.P.

"The naive belief that, if a product was not good, the FDA would prohibit its sale is just not realistic. . . . it is completely impossible for the FDA to check every batch of every product of every manufacturer. . . . Hence the integrity and reputation of the manufacturer assume unusual significance where drugs and health products are concerned."

Albert H. Holland, M.D.
formerly Medical Director of the
Food and Drug Administration

Smith Kline & French Laboratories, Philadelphia

News—Personal and Professional

The Kansas City Academy of General Practice named **C. G. Leitch**, M.D., Blue Springs, as 1961 Practitioner of the Year at a meeting the latter part of May.

The A.M.A. Section on General Practice at the recent meeting of the A.M.A. elected **W. J. Shaw, Sr.**, M.D., Fayette, as vice chairman of the section.

Speaking on "Your Heart and Your Health," **Thomas M. Holder**, M.D., Kansas City, spoke on June 1 before the American Business Women's Association of Kansas City.

At a Fellowship Dinner at the First Christian Church in Hannibal this spring the speaker was **James N. Haddock**, M.D., St. Louis.

The Boonville Lions Club unanimously elected **Byron M. Stuart**, M.D., Boonville, as president at their annual election of officers.

The Alumni Association of the St. Louis College of Pharmacy named **Carl F. Vohs**, M.D., St. Louis, as "Physician of the Year" and presented him an engraved medallion clock.

At a recent meeting of the Industrial Medical Association held in Los Angeles, **Richard A. Sutter**, M.D., St. Louis, was elected to a three year term on the board of directors.

George Kister, M.D., St. Charles, was reappointed city physician for the City of St. Charles recently.

The Independence Sanitarium and Hospital Nurses Alumni honored **Frederick W. Hink**, M.D., Independence, at a dinner late in May.

Named first place winners in the first yard of the month judging this year in Lexington were **Dr. and Mrs. B. H. Brasher**, Lexington.

The legislative committee of the Woman's Club of Kansas City was addressed by **Ralph R. Coffey**, M.D., Kansas City, at a May meeting.

The Missouri Heart Association installed **Harry M. Gilkey**, M.D., Kansas City, as president at its annual meeting. **W. J. Shaw, Sr.**, M.D., Fayette, was named president-elect; **Guy D. Callaway, Jr.**, M.D., Springfield, was named vice president; and **James A. Kinder**, M.D., Cape Girardeau, secretary.

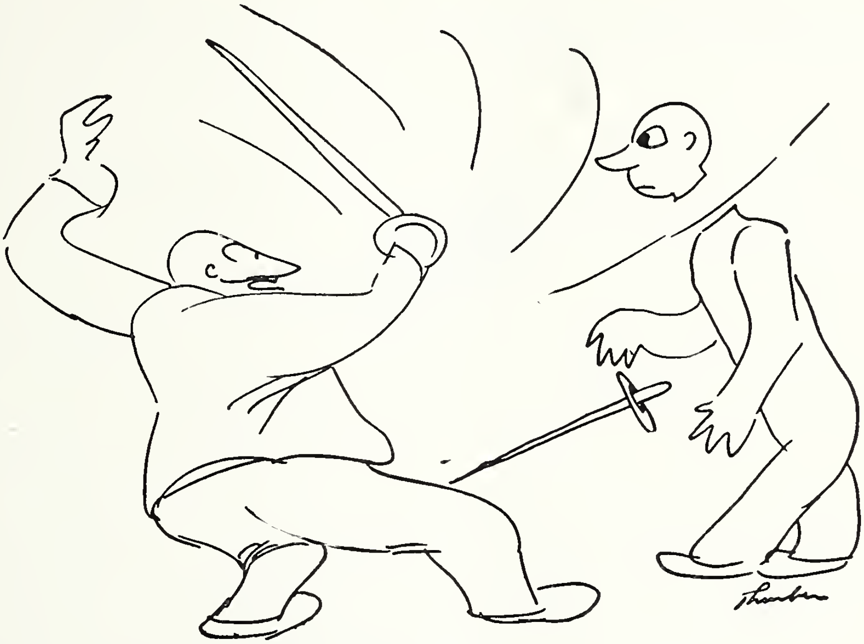
The St. Louis Clinical Diabetes Clinical Society has elected **Sidney Goldenberg**, M.D., St. Louis, as president.

National and state medical legislation was discussed by **John I. Matthews**, M.D., Jefferson City, at a meeting of the Cole County Medical Auxiliary.

RAMBLINGS—Continued

practice in Salem; Charles Worley, M.D., partnership practice in Sweet Springs; and A. E. Spelman, M.D., group practice in Smithville. Dr. J. H. Summers, Lebanon, President, Missouri State Medical Association, and Dr. Cecil G. Leitch, Blue Springs, President, Missouri Academy of General Practice, spoke to the group with remarks designed to acquaint the students with the purposes, programs and problems of their respective organizations. A question and answer period followed the formal presentations where the seniors were given opportunity to "query the experts." The moderator for this interesting occasion was Dr. Elvin Imes, Maryville, Chairman of the Public and Professional Relations Committee of the Missouri Academy of General Practice. Drs. Bass and Worley are members of the Committee on Rural Medical Service of the Missouri State Medical Association, while Dr. Spelman is a former chairman of this committee.

It is hoped that a similar, although expanded, program of this nature may be presented at regular intervals in the future to the senior medical students at our state medical school.



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For a better way to treat headache,
prescribe **Trancoprin**®

How Trancoprin relieves pain: Because most pain is accompanied by muscle spasm and tension, good medical practice suggests use of an analgesic that will relax skeletal muscles as well as dim pain perception. Such an analgesic is Trancoprin — a combination of aspirin and Trancopal®, a proved, safe, skeletal muscle relaxant and tranquilizer. Trancoprin can be prescribed for any pain, except pain of such severity that a narcotic is needed.

Dosage: Adults, 2 tablets three or four times daily; children (5 to 12 years), 1 tablet three or four times daily. Each tablet contains 300 mg. of aspirin and 50 mg. of Trancopal (brand of chlormezanone). Bottles of 100 tablets.

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The Phi Delta Theta Alumni Club of St. Louis, recently named **Richard W. Yore**, M.D., St. Louis, as St. Louis' Phi of the Year.

The American Association of Plastic Surgeons, at a recent meeting in New York, elected **Frank McDowell**, M.D., St. Louis, as vice president.

Recently elected officers of Kansas City Blue Shield are **Hubert M. Parker**, M.D., Kansas City, president; **Ira C. Layton**, M.D., Kansas City, first vice president, and **Gerald L. Miller**, M.D., Kansas City, secretary.

Medical Care legislation was discussed by **Stoughton F. White**, M.D., Kansas City, at a meeting of the Olathe, Kansas, Rotary Club at a late May meeting.

At the 72nd annual convention of the Episcopal diocese of West Missouri, the bishop's cross for meritorious service was presented to **C. M. Lederer**, M.D., Warrensburg.

The American Association of Railway Surgeons, at its spring meeting, elected **Dean F. Werner**, M.D., Kansas City, as vice president.

The Kansas City Tufts Club has elected **Louis Porter**, M.D., Kansas City, as president.

Among physicians invited to the meeting of the President's Committee on Employment of the Physically Handicapped, held in Washington, D. C., late in April, was **Maurice B. Roehe**, M.D., St. Louis.

Missouri Medical Service recently elected **R. O. Muether**, M.D., St. Louis, to a second term as president.

Hugh E. Stephenson, M.D., Columbia, has been named as the first United States physician to become a traveling professor of the James IV Society. The designation provides for six weeks of travel in the British Isles to exchange information with surgeons of England, Wales, Scotland and Ireland.

NEW MEMBERS

Behrens, Gerald L., M.D., 3 Colonial Court, St. Louis, has become a member of the St. Louis Medical Society. Dr. Behrens is a native of Illinois, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1954.

Capps, Eugene C., M.D., 807 Stadium Road, Columbia, has become a member of the Boone County Medical Society. Dr. Capps is a native of Tennessee, received his preliminary education in Tennessee, and his M.D. degree from Vanderbilt University in 1947.

Cochran, Donald O., M.D., Medical Center, Columbia, has become a member of Boone County Medical Society. Dr. Cochran is a native of Illinois, received his preliminary education in Tennessee, and his M.D. degree from Vanderbilt University in 1952.

Costen, William S., M.D., 1335 McCutcheon Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Costen is a native of Missouri, received his preliminary education in New Jersey, and his M.D. degree from Washington University School of Medicine in 1954.

Dexheimer, Frank R., M.D., 909 University Ave., Columbia, has become a member of Boone County Medical Society. Dr. Dexheimer is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Pennsylvania in 1952.

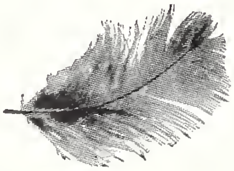
Eggers, George W., M.D., 807 Stadium Road, Columbia, has become a member of Boone County Medical Society. Dr. Eggers is a native of Texas, received his preliminary education in Texas, and his M.D. degree from the University of Texas in 1953.

Fink, LeRoy L., M.D., Poag Road, Rt. 1, Edwardsville, Illinois, has become a member of St. Louis Medical Society. Dr. Fink is a native of Illinois, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1956.

Huey, Kenneth H., M.D., 5340 Delmar Blvd., St. Louis, has become a member of St. Louis Medical Society. Dr. Huey is a native of Illinois, received his preliminary education in Arizona, and his M.D. degree from Washington University School of Medicine in 1955.

Jabczenski, Felix F., M.D., Army Medical Corps, Ft. Huachuca, Arizona, has become a member of St. Louis Medical Society. Dr. Jabczenski is a native of Missouri, received his preliminary education in Minnesota, and his M.D. degree from St. Louis University in 1956.

It takes so little to trigger an asthmatic attack...



**it takes so little MORE to control it...
the simple addition of ATARAX to your classic antiasthmatic therapy increases therapeutic success even in difficult patients**

Each MARAX tablet contains: ATARAX® (hydroxyzine HCl) 10 mg.—an antihistaminic tranquilizer beneficial in bronchial asthma and allergy.[1] **Ephedrine sulfate** 25 mg.—to reduce congestion. **Theophylline** 130 mg.—for bronchospasmolysis.

"Superiority of [MARAX] seems attributable to the inclusion in it of hydroxyzine in place of the conventional barbiturates."[2] In a series of patients generally refractory to the usual antiasthmatics, and who required steroids in order to obtain temporary relief, 70% showed good to excellent symptomatic relief with MARAX. Patients "...slept more comfortably and breathed more easily. The characteristic asthma wheeze was either markedly reduced or entirely relieved."[3]

If your asthma patients do not respond to standard therapy, they may need the "little MORE" that MARAX offers.

MARAX®

Usual adult dosage: One tablet 2 to 4 times daily. Full prescription information on request. Supplied: Bottles of 100 light blue, scored tablets. Prescription only.

References: 1. Santos, I. M. H., and Unger, L.: Ann. Allergy 18:172 (Feb.) 1960. 2. Charlton, J. D.: Ann. Allergy, In press. 3. Shaftel, H. E.: Clin. Med. 7:1841 (Sept.) 1960.

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Krause, G. Lynn, Jr., M.D., 8929 White Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Krause is a native of Missouri, received his preliminary education in Massachusetts, and his M.D. degree from the University of Pennsylvania in 1954.

Lerman, George S., M.D., 6318 Southwood Ave., St. Louis, has become a member of St. Louis County Medical Society. Dr. Lerman is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree at the University of Missouri School of Medicine in 1959.

Leslie, James T., Jr., M.D., 214 Jackson St., Jefferson City, has become a member of Cole County Medical Society. Dr. Leslie is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Louisiana in 1947.

Mueller, John J., M.D., 4040 Loughborough Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Mueller is a native of Illinois, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1960.

Nicolay, William R., M.D., 100 North Euclid Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Nicolay is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1954.

O'Bannon, L. W., Jr., M.D., 390 W. St. Anthony St., Florissant, has become a member of the St. Louis County Medical Society. Dr. O'Bannon is a native of Mississippi, received his preliminary education in Tennessee, and his M.D. degree from the University of Tennessee in 1948.

Plumlee, John E., M.D., 807 Stadium Road, Columbia, has become a member of the Boone County Medical Society. Dr. Plumlee is a native of Washington, D. C., received his preliminary education in Missouri, and his M.D. degree from the University of Missouri Medical School in 1959.

Robertson, William D., M.D., Poplar Bluff, has become a member of the Butler-Ripley-Wayne County Medical Society. Dr. Robertson is a native of Iowa, received his preliminary education in Arkansas, and his M.D. degree from the University of Arkansas in 1955.

Roper, Charles L., M.D., 83 Chafford Drive, St. Louis, has become a member of the St. Louis Medical Society. Dr. Roper is a native of Illinois, received his preliminary education in Colorado, and his M.D. degree at the University of Colorado in 1953.

Schaefer, George J., M.D., 1112 Surrey Hills Drive, St. Louis, has become a member of the St. Louis Medical Society. Dr. Schaefer is a native of Illinois, received his M.D. degree from Beaumont Hospital Medical College in 1922.

Swope, Joseph A., M.D., 4230 Exeter Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Swope is a native of Pennsylvania, received his preliminary education in Pennsylvania, and his M.D. degree from St. Louis University School of Medicine in 1960.

DEATHS

Kirchner, Walter C. G., M.D., St. Louis, a graduate of Washington University School of Medicine, 1901; member of St. Louis Medical Society; aged 86; died May 15.

Castles, John E., M.D., Kansas City, a graduate of the University of Kansas Medical School, 1917; member of Jackson County Medical Society; aged 70; died May 16.

Steiner, Albert S., M.D., St. Louis, a graduate of Marion Sims College, 1903; member of St. Louis Medical Society; aged 83; died May 23.

Riley, Frederick P., M.D., Perryville, a graduate of the University of Kentucky, 1912; member of Perry County Medical Society; aged 76; died May 24.

Roundy, Collis I., M.D., St. Joseph, a graduate of Ensworth Medical College, 1914; member of Buchanan County Medical Society; aged 73; died May 26.

Lamson, Roy C., M.D., Neosho, a graduate of the University of Pennsylvania, 1900; member of Ozarks Medical Society; aged 89; died May 29.

Brockelmann, Erich, M.D., University City, a graduate of the University of Vienna, Austria, 1918; member of St. Louis Medical Society; aged 71; died June 3.

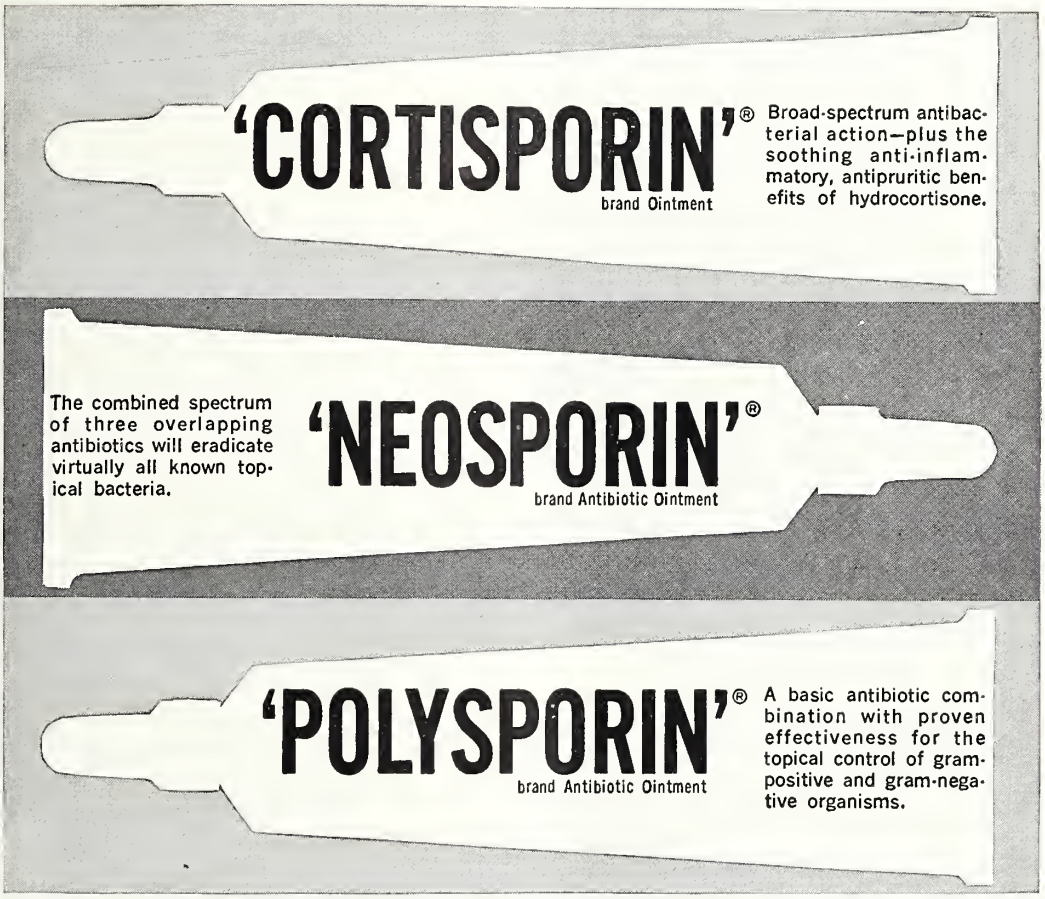
Gay, Elmer E., M.D., Richmond, a graduate of the University of Arkansas School of Medicine, 1928; member of Clay County Medical Society; aged 61; died June 7.

Walden, James H., M.D., Kansas City, a graduate of Meharry Medical College, 1940; member of Jackson County Medical Society; aged 51; died June 10.

Plag, Albert F., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1918; member of St. Louis Medical Society; aged 72; died June 11.

Alberty, Omer L., M.D., Carl Junction, a graduate of Kansas City Medical College, 1901; member of Jasper County Medical Society; aged 86; died June 17.

'B. W. & Co.' 'Sporin' Ointments
rarely sensitize . . .
give decisive bactericidal action
for most every topical indication


'CORTISPORIN'®
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Broad-spectrum antibacterial action—plus the soothing anti-inflammatory, antipruritic benefits of hydrocortisone.

The combined spectrum of three overlapping antibiotics will eradicate virtually all known topical bacteria.

A basic antibiotic combination with proven effectiveness for the topical control of gram-positive and gram-negative organisms.

Contents per Gm.	'Polysporin'®	'Neosporin'®	'Cortisporin'®
'Aerosporin'® brand Polymyxin B Sulfate	10,000 Units	5,000 Units	5,000 Units
Zinc Bacitracin	500 Units	400 Units	400 Units
Neomycin Sulfate	—	5 mg.	5 mg.
Hydrocortisone	—	—	10 mg.
Supplied:	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of ½ oz. and ⅛ oz. (with ophthalmic tip)

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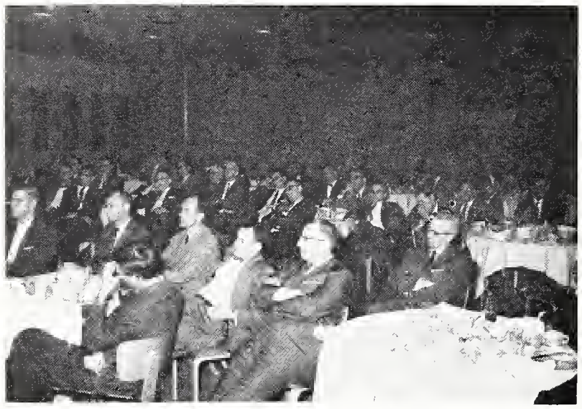
County Society News

FIRST DISTRICT

JOSEPH L. FISHER, ST. JOSEPH, COUNCILOR

BUCHANAN COUNTY MEDICAL SOCIETY

Eighty physicians and dentists attended the annual joint meeting of the Buchanan County Medical Society and the Northwest Missouri District Dental Society on May 1 at Hotel Robidoux. Presiding jointly were Drs. Judson M. Hughes, Medical Society President, and Henry W. Fricke, President of the Dental Society.



Dinner was over and the program began.

Mr. Hull poses with Drs. Hughes, Petersen and Fisher.

The speaker was Congressman William R. Hull, Jr., from Missouri's Sixth District who discussed medical care for the aged and legislation to implement such aid. He traced federal legislative proposals for medieal care from the Wagner, Murray, Dingell bills of compulsory health insurance to the present bills before Congress, the administration backed Anderson bill and the Javits bill. He also spoke on the Kerr-Mills law passed at the last session of Congress which he supported. Mr. Hull noted that few states had passed enabling legislation for the Kerr-Mills law. He expressed himself against the administration proposal which would put medical care for the aged under Social Security because it would not help most of those who actually need aid in paying for their medical care and also would mean government control of the medical care of those receiving help under the proposal. The Javits bill, while having some advantages over the administration bill, was lacking in many ways too and would not cover as many persons as the administration proposal.

Mr. Hull called on the medical and dental professions for constructive assistance for legislation that would aid the needy aged and still preserve freedom while promoting security.

William B. Rost, M.D., *Secretary*

MEETING OF JUNE 7

Frank K. Woolley, attorney and field representative of the Washington office of the American Medical Association, was the speaker at the June 7 meeting of the Buchanan County Medical Society at Hotel Robidoux, St. Joseph.

Mr. Woolley discussed "Legislation and Socialism." The speaker, in a fiery presentation, assailed federal medical aid as part of a socialist conspiracy. He described schemes to socialize medicine through compulsory legislation as part of the over-all Socialist design to destroy the American system of freedom and limited government.

He also pointed out the government program of agricultural subsidies and controls, and federal aid to education as part of the scheme of Fabain or intellectual socialists to bring about complete government dominance of our lives.

Forty-five doctors attended the dinner and business meeting preceding the program. Thirty-five Auxiliary members and other guests joined the meeting for the program. Dr. Judson M. Hughes, President, presided. Dr. Joseph L. Fisher, First District Councilor of the Missouri State Medical Association, presented the speaker.

William B. Rost, M.D., *Secretary*

GRAND RIVER COUNTY MEDICAL SOCIETY

On May 11, 1961, members of the Grand River

Introducing PHILIPS ROXANE

A new name in Pharmaceuticals

Philips Roxane comes to you as a new name in American pharmaceutical manufacture. But our roots go deep. We have well-established resources in this country. In Holland and elsewhere in Europe, we have access to research from which substantial contributions have been made in the areas of human, animal and plant health.

A wide range of new pharmaceuticals is now being developed which will have significant usefulness to you in your practice.

For example, extensive studies are now being carried out in organic synthesis, vaccines, and radioactive isotopes. Some of these pharmaceuticals and biologicals are presently undergoing clinical trials in this country.

One research project nearing completion is a measles vaccine, now undergoing extensive U. S. clinical trial. Another preparation, soon to be available, is a progestational agent which gives promise of offering distinct advantages over those presently available. A true progestin, it will have wide application in female disturbances without androgenic, estrogenic, or corticosteroid side effects.

Philips Roxane has acquired affiliates throughout the United States, where research and development in human, animal and plant medicines are being greatly extended through their production facilities and sales organizations.

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PROGRESS IN RESEARCH FOR MEDICINE

Medical Society met with members of the Auxiliary at the Strand Hotel in Chillicothe.

Following dinner the ladies held a separate meeting at which Mrs. David Stanford and Mrs. J. R. Anderson of Carrollton presented a program on "Flower Arrangement."

The doctors, notoriously unimpressed by nonmedical speakers, found a challenging exception in Mr. Frank K. Woolley of the Field Service Division of the American Medical Association. Mr. Woolley forcefully documented the retreat of free enterprise and its inherent strength before the onslaught of socialism, whose advocates have successfully adopted the tactics of a famous Roman general, deception, ruse and flank attacks while choosing never to meet the enemy head on. He advised that we study the past and put the present situation in the proper perspective with history. During the hundreds of years of recorded history most of the world has been enslaved by its own governments and their culmination in Communism has routinely been preceded by small doses of Socialism. The United States has so far remained free but its 180 years represent only a short span in the millenium of recorded history. He warned that unlimited power to tax leads to unlimited power to subsidize and finally unlimited power to control. Mr. Woolley suggested that not only doctors but all citizens should contact their legislators in whom lies the last hope of retaining government as the servant of the people and not the master.

Those present concluded that if Mr. Woolley could make enough speeches there is yet hope for free enterprise.

Guests present at the meeting were: Mr. Frank K. Woolley, Mrs. David Stanford, Mrs. J. R. Anderson, Mr. Laird and Mr. Friedman, preceptors from the University of Missouri Medical School, who were guests of Drs. Robert Smith and James Sweiger respectively.

There was no business and the meeting was adjourned with the admonition that all turn out for the golf meeting in June.

FRANK R. DALEY, M.D., *Secretary*

MEETING OF JUNE 8

The Grand River Medical Society and Auxiliary met at the Chillicothe Country Club June 8 for the annual golf tournament. Among the guests were Vernon E. Wilson, M.D., Dean of the University of Missouri Medical School, the featured speaker, representatives of the major pharmaceutical manufacturers and druggists of the area.

Dr. Chester Clark, President, Chairman and sole member of the tournament committee, overcame these obstacles and reluctantly accepted the trophy awarded to the doctor having the lowest score. He presented the remainder of the prizes and then introduced the guest of honor, Dean Wilson, who spoke of the accomplishments and problems of the medical school, both academic and budgetary. Pertinent facts observed were that 2¼ million dollars are spent each year at the medical school for indigent care and that methods were being devised to improve the admitting procedure. He emphasized the need for channeling the interests of more high school students and graduates into the field of medicine.

Conspicuously missing from the golf course was Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association, whose reassuring presence in the rough and sand traps has come to be anticipated at the annual event.

There was no business and the meeting was adjourned early.

FRANK R. DALEY, M.D., *Secretary*

SECOND DISTRICT

A. P. ROWLETTE, MOBERLY, COUNCILOR

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY

Tuesday night, May 16, members of the Marion-Ralls-Shelby County Medical Society were privileged to hear a most interesting and informative talk by Dr. Norman Asel, dermatologist, from the University of Missouri Medical School on the subject "Superficial Dermophytes."

The number of questions and amount of discussion from the audience was good evidence of the fine reception of this scientific presentation. Twenty-four doctors were present to enjoy the evening festivities, including social hour, dinner and formal program.

WYETH HAMLIN, M.D., *Secretary*

MEETING OF JUNE 20

Twenty-two physicians attended a dinner meeting of the Marion-Ralls-Shelby County Medical Society at the Moose Lodge in Hannibal on Tuesday night, June 20. The scientific program for the evening was given by James N. Haddock, M.D., psychiatrist from St. Louis. Dr. Haddock spoke on "Office Psychiatry."

Following his interesting and informative presentation, a question and answer period brought forth additional valuable discussion of the problems encountered in the handling of office psychiatry.

An important business session followed the scientific presentation where matters such as indigent medical care, functions of a grievance committee, radio programs and other similar items were considered.

The speaker received rapt attention.

Dr. Hamlin, secretary, and Dr. Bach, president, are seated with Dr. Haddock, the speaker.

An out-of-town guest in addition to the speaker, Dr. Haddock, was our State Association Field Secretary, Ray McIntyre.

Wyeth Hamlin, M.D., *Secretary*

FOURTH DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Lincoln County Memorial Hospital in Troy on Tuesday night, May 23. The evening festivities began with a social hour at the home of Dr. Louis Hetlage of Troy and then continued at the hospital where an excellent steak dinner was served followed by a tour of the hospital and an interesting scientific program.

A high percentage of the membership was present.

The scientific discussion of the evening was a panel on "The Management of Acute Trauma in the Emergency Room." Participants were: Earl Holt, M.D., St. Louis, orthopedic surgeon; S. J. Merenda, M.D., St. Louis, radiologist; V. P. Muenster, M.D., St. Charles, general surgeon, and Louis P. Hetlage, M.D., Troy, general surgeon, who served as moderator. Questions and comments from the audience added to the value of the panel presentation.

Panel members were Drs. Merenda, Holt, Muenster and Hetlage.

Twenty physicians were present to enjoy and profit from a full evening of medical, social and professional activities.

V. P. Muenster, M.D., *Secretary*

(Continued on page 856)

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Bibliography *(13 clinical studies, 858 patients)*: **1.** Alexander, L. (35 patients): Chemotherapy of depression – Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. *166*:1019, March 1, 1958. **2.** Bateman, J. C. and Carlton, H. N. (50 patients): Meprobamate and benactyzine hydrochloride (Deprol) as adjunctive therapy for patients with advanced cancer. Antibiotic Med. & Clin. Therapy 6:648, Nov. 1959. **3.** Beerman, H. M. (44 patients): The treatment of depression with meprobamate and benactyzine hydrochloride. Western Med. *1*:10, March 1960. **4.** Bell, J. L., Tauber, H., Santy, A. and Pulito, F. (77 patients): Treatment of depressive states in office practice. Dis. Nerv. System 20:263, June 1959. **5.** Breitner, C. (31 patients): On mental depressions. Dis. Nerv. System 20:142, (Section Two), May 1959. **6.** Gordon, P. E. (50 patients): Deprol in the treatment of depression. Dis. Nerv. System *21*:215, April 1960. **7.** Landman, M. E. (50 patients): Clinical trial of a new antidepressive agent. J. M. Soc. New Jersey. In press, 1960. **8.** McClure, C. W., Papas, P. N., Speare, G. S., Palmer, E., Slattery, J. J., Konefal, S. H., Henken, B. S., Wood, C. A. and Ceresia, G. B. (128 patients): Treatment of depression – New technics and therapy. Am. Pract. & Digest Treat. *10*:1525, Sept. 1959. **9.** Pennington, V. M. (135 patients): Meprobamate-benactyzine (Deprol) in the treatment of chronic brain syndrome, schizophrenia and senility. J. Am. Geriatrics Soc. 7:656, Aug. 1959. **10.** Rickels, K. and Ewing, J. H. (35 patients): Deprol in depressive conditions. Dis. Nerv. System 20:364, (Section One), Aug. 1959. **11.** Ruchwarger, A. (87 patients): Use of Deprol (meprobamate combined with benactyzine hydrochloride) in the office treatment of depression. M. Ann. District of Columbia 28:438, Aug. 1959. **12.** Settel, E. (52 patients): Treatment of depression in the elderly with a meprobamate-benactyzine hydrochloride combination. Antibiotic Med. & Clin. Therapy 7:28, Jan. 1960. **13.** Splitter, S. R. (84 patients): Treatment of the anxious patient in general practice. J. Clin. & Exper. Psychopath. In press, April-June 1960.

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Meeting of June 27

On Tuesday evening, June 27, a dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air in Wentzville. The evening festivities began with a social hour followed by dinner and then a most welcome scientific program.

Dr. James P. Murphy, Dr. Kenneth Wolters, and Dr. Manfred Thurman, St. Louis, representing the Cardiovascular Section of St. Louis University Medical School, presented a panel discussion on "Recent Advances in the Treatment of Hypertension."

This discussion was well received by the physicians present. Comments from the audience added to the discussion of this important topic.

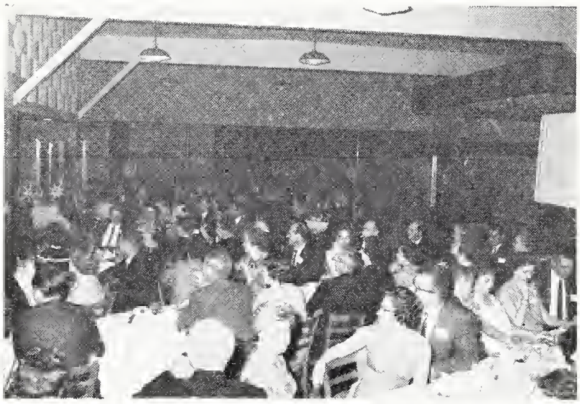
V. P. Muenster, M.D., *Secretary*

SIXTH DISTRICT

O. B. BARGER, COUNCILOR, HARRISONVILLE

Henry, Johnson, Pettis, Lafayette-Ray, Saline County Medical Societies

By invitation of the 805th Medical Group, U. S. Air Force of the Whiteman Air Force Base, Knobnoster, Missouri, a joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies and the doctors' wives was held at the base on Wednesday evening, May 17. The evening festivities were all centered in the Officers Club. More than 125 people were present on this occasion and privileged to hear a program of timely interest.



The program held the interest of all present.

Following an enjoyable social hour, a bountiful dinner, a one hour program was presented by Captains Samuel P. Chunn, Richard M. Chubb and Paul F. Nugent. These medical officers are members of the Aerospace Medical Laboratory at Wright-Patterson Air Force Base, Ohio. They are in their third year in the advanced course in aviation medicine and have extensive first-hand information on the astronaut program. They talked about this and the orbital mission including monitoring and launching of space capsules.

Guest speakers were seated at the head table with Dr. Hollingsworth, who presided.

In addition, Dr. Chubb, who was the medical monitor for this project, presented a 15 minute film on the "Man-High Experience." It may be recalled from reading in *Life* and *Reader's Digest,* that this was the propect in which Captain Kittinger jumped from a balloon at 102,000 feet.

This program was well received by both the doctors and their wives who were fortunate in being present.

O. B. Barger, M.D., *Councilor*

West Central Missouri Medical Society

The West Central Missouri Medical Society met in regular session Thursday evening, May 18, at Beuhla's 71 Highway Cafe, Harrisonville. The meeting began with the usual social hour followed with a delightful steak dinner, nicely served by the cafe.

Following the social hour and dinner, President Robert Magee called the meeting to order, and due to lateness of beginning the meeting, asked the scientific part of the program to proceed in order that the speakers could return to Kansas City immediately following their presentation.

The scientific portion of the evening was presented under the auspices of the Maternal Welfare Committee of the Missouri State Medical Association with a panel of Dr. Robert Brown and Dr. James Keeler, both of Kansas City, members of the Maternal Welfare Committee of

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By Benjamin Tenney, M.D., Director, Department of Obstetrics and Gynecology, Boston City Hospital; Clinical Professor of Obstetrics, Harvard Medical School; and Brian Little, M.D., Boston Lying-in Hospital; Instructor in Obstetrics, Harvard Medical School. About 500 pages, 6½"x9¾", with 100 illustrations. About $9.00. *New—Ready in September!*

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western Missouri and Dr. Frank Mantz, pathologist of Kansas City, who works with a group of the Kansas City pathologists assisting the Maternal Welfare Committee in their investigation and studies in maternal deaths.

Dr. Keeler, who acted as moderator, gave a quick résumé on the work of the Maternal Welfare Committee and described their work in the study of all maternal deaths in the western half of the state. He explained that those deaths occurring in the Eastern part of the state are studied by the St. Louis group of the same committee. He explained that their work was not intended to incriminate any physician or to act as investigators per se, but they were merely studying the histories, physical findings and records available in all cases of maternal death to see what, if any, mistakes were made, if the death was really maternal, and what could be done in the future to reduce such deaths.

Dr. Robert Brown spoke and then presented two cases of maternal death with all the details and hospital records and the treatment each case had received.

Dr. Mantz then discussed the cases in detail with respect to the pathological findings at autopsy and had a series of fine slides to illustrate his findings.

The meeting, after the presentation of each case, was thrown open to discussion by the members of the Society present. This was an excellent program and many points of interest were brought out by each of those discussing the cases. Each panelist closed with a summary. It was one of the finest meetings we have had during the year.

Those present besides our guest were: Dr. and Mrs. Gene Baska, Dr. and Mrs. Robert Brownsberger, Appleton City; Dr. and Mrs. Robert Magee, Eldorado Springs; Dr. and Mrs. Roy Pearse, Nevada; Dr. and Mrs. C. W. Luter, Butler; Dr. and Mrs. O. B. Barger, Dr. Edward Jones, Dr. Jack Moody of Harrisonville. This was a small number for such a large Society but the program was much enjoyed by all who attended. We hope that future attendance will be better.

Our meeting adjourned until June 8, when we will hold a meeting in Nevada, our annual Lawyer, Dentist, Physician, get-together, at which time a prominent attorney will address the combined group on a mutual legal-medical level.

Carter W. Luter, M.D., *Secretary*

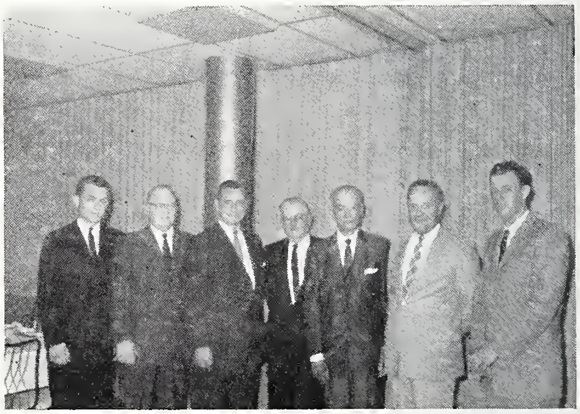
Meeting of June 8

The regular monthly meeting of the West Central Missouri Medical Society was held in the Nevada Country Club, Nevada. on Thursday evening, June 8. As usual, we had an enjoyable social hour beginning at 6:30 p.m., but this meeting was just a bit different from regular meetings in that we had with us the dentists and attorneys of the area. They added much to the occasion.

After the social hour we formed the line much as in the army days of World War I, where some of us were, and World War II, where more of us were present, to march through to get a most lovely prepared meal on a "Board-by Smorgus."

Lt. Gov. Bush spoke to an appreciative audience.

President Robert Magee, Eldorado Springs, took over at this point and made several recognitions among those present and then proceeded to the program of the evening. He presented Attorney William G. McCaffree of Nevada, President of the Vernon County Bar, who introduced the featured speaker for the evening. The speaker was Lieutenant Governor Hilary Bush who pre-



Among those present were Mr. McCaffree, Judge Stockard, Lt. Gov. Bush, Dr. Leitch, president of the Missouri Academy of General Practice, Dr. Summers, President of the Missouri State Medical Association, Dr. Barger, Councilor, and Dr. Magee.

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sented a most excellent discussion on the tax problems of the state, and on many other points of legislation before the house and the senate this year. He then branched out into the field of higher education in reference to our great State University and went further into some of the problems that will be faced, and are even now being faced, by the University as to admission of students. The plant has to be enlarged. They are working now at capacity levels, with more students coming. It is our duty to provide places for these students and if we do we expand our facilities at our State University levels or else turn them away. It is too bad that the whole State of Missouri could not have heard Lieutenant Governor Bush make his presentation with not one note in hand.

We were also honored by the presence of Missouri Supreme Court Judge John Stockard on this signal occasion.

There were seventy doctors, lawyers and dentists present at this meeting and all were pleased with the evening of sociability which ended with a pleasant thought of a return next year.

This is a pleasant way to interrupt our 1960-1961 meeting session until the next meeting in Nevada, this September, for the doctors' and athletic coaches' "get-together." We always seem to start well and end well at Nevada, the place which has the facilities for handling large turnouts. We are grateful for the Nevada Country Club facilities.

Carter W. Luter, M.D., *Secretary*

EIGHTH DISTRICT

DOYLE C. MCCRAW, BOLIVAR, COUNCILOR

Greene County Medical Society

A regular meeting of the Greene County Medical Society was held Friday, April 28, in conjunction with the 6th Annual Ozark Empire Cancer Conference at Galli's Half-A-Hill. Fifty-eight members of the Society and 11 guests were present for the meeting. The program began with a luncheon at 12:00 p.m. with Dr. Lyle D. Litton, Chairman of the Cancer Control Committee, presiding.

Following luncheon, the following papers were presented: "Antibiotic Prophylaxis in Cancer Surgery," presented by Dr. Alfred S. Ketcham, Associate Surgeon, National Cancer Institute, Bethesda, Maryland; "Recent Advances in Cancer Chemotherapy," presented by Dr. Emil Frei, III, head of the Chemotherapy Service, National Cancer Institute, Bethesda, Maryland; "Studies on the Use of Pharmacological Agents in Clinical Radiation Therapy," presented by Dr. Kirland C. Brace, Radiation Therapist, National Cancer Institute, Bethesda, Maryland.

The conference dinner held at 6:00 p.m. with Dr. John P. Ferguson, President of the Greene County Medical Society, presiding. Dr. Ferguson welcomed the out of town guests to the Conference. The business portion of the meeting of the Greene County Medical Society was waived with the exception of the minutes of the March meeting which were approved as published in the *Bulletin*. The President then turned the meeting over to Dr. Emil Frei who moderated the question and answer panel discussion program for the evening.

Upon conclusion of the program, Dr. Ferguson expressed appreciation to the panelists for making the trip to Springfield and for the presentation of their excellent program during the afternoon and evening. President Ferguson expressed appreciation to Drs. Litton, Auner, Bonebrake, Johnson and Ashley, members of the Cancer Control Committee, for making arrangements for the program. He reminded the members of the Society that the May 26 regular meeting will be a joint meeting hosted by the Greene County Bar Association.

Dr. Ferguson read an announcement on the May meeting of the Springfield Academy of Medicine. There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

NINTH DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

Harold D. Harvey, M.D., plastic and reconstructive surgeon, Springfield, spoke at a dinner meeting of the Mid-Missouri Medical Society at the Munger Moss Cafe in Lebanon on Thursday night, May 25. He spoke on "Problems in Plastic Surgery," well illustrated with excellent colored slides.

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met at the American Legion Hall in Willow Springs, on Wednesday night, April 26.

Dr. Ian Thompson, urologist, University of Missouri Medical Center, Columbia, was guest

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speaker for the evening. He spoke on "Office Urology." His talk was informative and instructive. There was much discussion following the presentation of his talk.

A short business meeting was held following Dr. Thompson's talk. The next meeting will be in Cabool on Wednesday, May 24.

Rollin H. Smith, M.D., *Secretary*

TENTH DISTRICT

W. D. ENGLISH, CARDWELL, COUNCILOR

Butler-Wayne-Ripley County Medical Society

A joint meeting of the Butler-Wayne-Ripley County Medical Society with the Butler County Bar Association, was held at the Hickory House in Poplar Bluff on Tuesday evening, May 16. This joint session had been under plans for some time with the thought in mind of presenting a discussion of problems common to doctors and lawyers. The program was arranged by a committee appointed by both the Medical Society and Bar Association.

The formal part of the program, consisting of a discussion of some of these common problems, was moderated by Dr. Lester Harwell. He called upon various doctors and lawyers to discuss certain specific problems which were presented. It was felt that this program was an informative one both to the medical and law professions and additional meetings of this nature are planned for the future. The meeting was also honored by the presence of Dr. W. D. English, Cardwell, Councilor of the Tenth District of the Missouri State Medical Association. Dr. English spoke briefly on the importance of House Bill 690 in the Missouri Legislature which has to do with implementation of the Kerr-Mills Law as far as Missouri is concerned.

E. T. Hansbrough, M.D., *Secretary*

Mineral Area County Medical Society

A meeting of the Mineral Area County Medical Society was held Thursday night, May 25, at the Clinic Building of the State Hospital in Farmington. The scientific program for the evening was furnished by the University of Missouri Medical School as follows:

John Modlin, M.D., Professor and Chairman, Department of Surgery, and Carl Almond, M.D., Assistant Professor of Surgery, presented an interesting discussion on "Surgery for Occlusive Vascular Disease." In addition, they also remarked on features of progress at the University of Missouri Medical Center.

Paul Dennis, M.D., *Secretary*

Meeting of June 22

A meeting of the Mineral Area County Medical Society was held Thursday night, June 22, in the Clinic Building of the State Hospital at Farmington. The program for the evening was furnished by the Missouri Academy of General Practice in cooperation with the Cardiovascular Section of St. Louis University Medical School. It consisted of a discussion on "Recent Advances in the Treatment of Hypertension," by Richard J. Dames, M.D., Instructor in Internal Medicine, St. Louis University Medical School, and Manfred Thurman, M.D., Fellow in Cardiology, St. Louis University Medical School.

Theirs was an interesting discussion of a practical subject.

Paul Dennis, M.D., *Secretary*

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The Council

The Council met at Hotel Chase, St. Louis, on May 20-21, 1961, with Kenneth C. Hollweg, M.D., Kansas City, Chairman, presiding. Those present were Drs. Hollweg; Joseph L. Fisher, St. Joseph; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Doyle C. McGraw, Bolivar; E. A. Stricker, St. James; W. D. English, Cardwell; J. H. Summers, Lebanon; Donald M. Dowell, Chillicothe; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; H. M. Hardwicke, Jefferson City; Messrs. W. H. Bartleson, Kansas City; Hollister Smith, St. Louis; John Buckner, Springfield; Lemoine Skinner, Jordan Singleton, Ray McIntyre, T. R. O'Brien, and Helen Penn, St. Louis. Attending part of the meeting were Dr. Vernon E. Wilson, Columbia; Mr. Frank Woolley, Chicago; Edgar Mothershead, St. Louis; Gene Lunn and William Brennan, St. Louis.

Minutes of the meetings of the Council on March 19 and March 22, on motion duly seconded, were approved.

COMMITTEE REFERRALS

Mr. O'Brien referred to resolutions introduced in the House of Delegates, one, pertaining to maternal mortality studies, was referred to the Committee on Maternal Welfare; a resolution on corporate practice and hospital accreditation was referred to the Committee on Corporate Practice; a resolution on Public Service, to be referred to a commitee on Public Service to be appointed, and two resolutions regarding traumatic accidents were referred to the Committee on Trauma.

EXHIBITS

Mr. O'Brien presented a report from the Medical Exhibitors Association on the Kansas City session which showed that the exhibitors had been, in the main, pleased with the session.

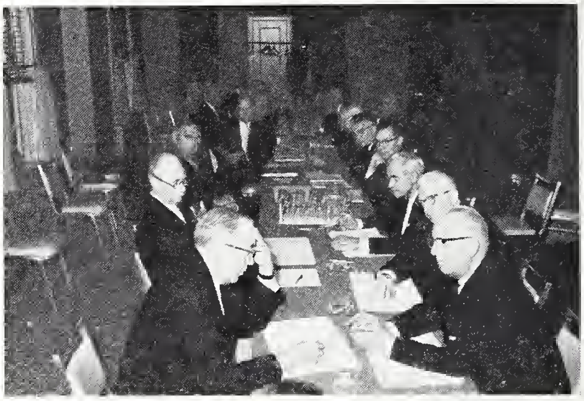
HEALTH FAIR

It was reported that expenditure for the exhibit at the Health Fair in Kansas City had remained within the stipulated amount.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported several recent meetings in the state, among them a meeting in St. Joseph on May 1 with dentists meeting with the Buchanan County Medical Society with Congressman Hull as speaker; the Ozark Cancer Conference in Springfield on April 28, and the Greene County Medical Society as guests of the dental society on April 19 and of the bar association on May 26; the Spring Clinical Conference on May 11 and 12 in Columbia; Jasper County Medical Society having the bar association as guests on April 11; the Grand River Medical Society having Mr. Frank Woolley of the AMA as a guest on May 11; a program on "Space Medicine" at the Whiteman Air Force Base on May 17. He listed coming meetings as Grand River Medical Society meeting and golf tournament, with Dr. Vernon E. Wilson, Columbia, as speaker on June 8; The West Central Medical Society having dentists and lawyers as guests on June 8 with Lt. Gov. Hilary Bush as speaker; a Missouri Academy of General Practice meeting on medical economics at Arrowhead Lodge, Lake of the Ozarks, on July 30; Jackson County Medical Society to have Mr. Woolley as speaker on May 23.

Mr. McIntyre reported that of the 62 graduates of the University of Missouri this year, 25 will intern in Missouri. He said that 13 seniors had elected the preceptor program this year and that 24 of 65 students have elected to take the preceptor program next year. Of last year's class nine intend going into practice in Missouri. He reported a luncheon meeting for senior students held during Spring Clinical Conference in Columbia when a panel program on solo, partnership and group practices was presented.



The Council met on Saturday and Sunday.

CRIPPLED CHILDREN'S SERVICE

Dr. Wilson discussed the situation of the Crippled Children's Service, saying that it has been broadened to include other types of care than orthopedic cases and that the Board of Curators feels that in some cases pediatricians should be used as consultants in addition to the surgeons. Further consideration will be given to this question at the next meeting of the Council.

EYE BANK

Dr. Wilson gave the history of the Lions Club of Missouri working in cooperation with the University of Missouri in setting up an eye bank at Columbia. He said there had been some difficulty of cooperation with other eye banks, but that problems seemed to be working out.

The Committee on Eye Health is studying the eye bank situation and will report to the Council at a later date.

LEGISLATION

Mr. O'Brien presented information on legislation affecting the practice of medicine. He discussed the following bills (on which final action is presented on page 810): H.B. 133, H.B. 157, H.B. 35, S.B. 77, S.B. 146, S.B. 82, H.B. 107, H.B. 106, H.B. 105, S.B. 359, H.B. 498, H.B. 182, H.B. 633, H.B. 690.

KERR-MILLS H.B. 690 AND 633

The possibility of passage of either H.B. 690 or 633, in their present forms, was discussed and the consensus

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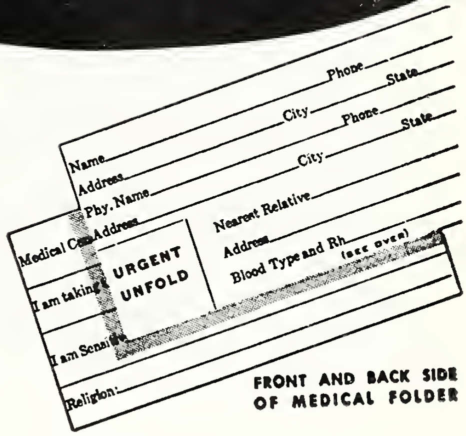
MAY BE *Life Saving* IN CASE OF DISASTER



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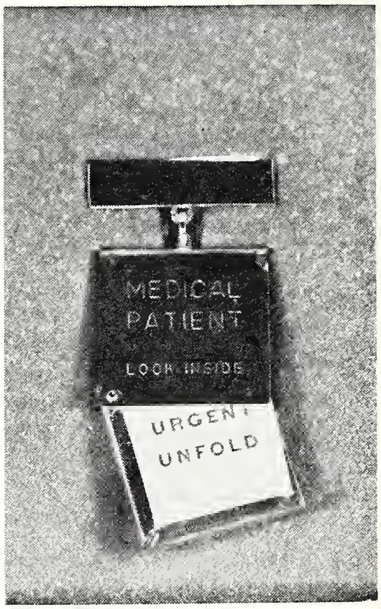

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of opinion was that with the state searching for more revenue, that full implementation was not possible. It was suggested that a House Committee Substitute for House Bills 690 and 633 which will provide for minimal implementation might be more acceptable to the legislature.

Following discussion, in motion of Dr. Stuart, duly seconded, Mr. O'Brien was given authority to offer the substitute bill as a compromise.

Dr. Doyle, Treasurer, reported to the Council.

ST. LOUIS COUNTY PLAN

Dr. Whitener reviewed the St. Louis County Medical Society plan for reduced fee service to senior citizens. He said the plan, in which practically all members are cooperating, provides for reductions in fees ranging from 10 to 90 per cent. With a population in the county of three quarters of a million people, with 50,000 estimated to be over 65 years of age, there have been only 60 people who have applied for the cards entitling them to reduced fees. His conclusion was that doctors had already been providing reduced fees for lower income patients, that the community is a relatively high-income area, and that older people there are more self-supporting and in better health than some politicians would have the public believe.

TRIPLE POINT PROGRAM

The following suggested triple point program was presented: An essential and urgent plan for—

1. Implementation of the Kerr-Mills Law in Missouri.
2. Effective opposition to King-Anderson legislation in Congress.
3. Institution of local action programs in each county society, supported by projects on the MSMA level, to provide the real and long-term solutions to problems of health care of the people.

Three programs aimed at the accomplishment of a single objective—to solve any existing problems of the financing of health care without the interference of a compulsory Federal system of socialized medicine.

MOBILIZATION—GENERAL

* 1. Letter to local societies reporting House of Delegates actions on Kerr-Mills and King-Anderson among other actions taken.

* 2. Letter to societies outlining plans and requesting appointment of local committees in all societies which have not yet acted (see Kerr-Mills No. 5).

* 3. Letter to Auxiliary President outlining plans (see Kerr-Mills No. 6).

* 4. Appointment of Mr. William J. Brennan as Program Coordinator. (Mr. Brennan will be on temporary loan from his position as Professional Relations Representative at St. Louis Blue Shield.) As program coordinator, his principal activities will be in the field of local medical society contacts to provide assistance and advice in carrying out the program.

5. Continuing follow-up through letters, personal visits, etc., to organize societies and make sure jobs are done and enthusiasm is kept high.

KERR-MILLS IMPLEMENTATION

* 1. Draft and introduce legislation required (H.B. 690) (by April 4—session ends June 30).

* 2. Statewide release on introduction of bill—enclose résumé of law from AMA Legislative Digest—enclose five reasons why.

* 3. Letter to Council and Committees on Aging and Medical Economics—enclose release—cover other bill submitted on Kerr-Mills, etc.

*4. Letter to membership on bill—enclose five reasons why and analysis of H.B. 690—urge support and letter writing.

* 5. Letter to local society presidents—urge appointment of committee, active support by society members, contacts with other organizations.

* 6. Letter to Auxiliary President similar to that to local society presidents. Urge similar organization; determine method of handling communications.

** 7. Distribute "Health Care for Aged" kits to societies.

8. Letter No. 2 to membership, later in session—write now.

9. Other items to be developed as legislation progresses through General Assembly—testimony for hearings, statements for committees, additional news releases, letters to membership as needed, etc. This may include an entire new program dealing with appropriations for Kerr-Mills.

10. After bills are passed, another publicity and information program will have to be developed to explain the details of implementation worked out by the Division of Welfare, etc.

KING-ANDERSON

* 1. Send resolution of MSMA House to President of U. S. and Missouri Federal legislators.

** 2. Distribute kit for editorial writers—both managing and editorial page editors on major papers—with letter from MSMA explaining situation in Missouri, analysis of H.B. 690.

3. Distribute kit "Medical Care for the Aged" to local medical societies urging them to use materials in whatever way they can. (Communications Kit.)

4. Organize local committees through the Public Service Committees of local societies to work to oppose King-Anderson—include druggists, nurses, dentists, etc. Through this try to set up and promote speakers bureaus, distribution of literature, etc. (Build on Kerr-Mills organization.)

5. Letter to membership briefing King-Anderson bills, explaining dangers, urging physicians to talk to patients and friends, write letters to Congress.

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* Items so marked have been completed, as of May 5, 1961.
** Materials ordered from AMA.

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pHisoHex, used as a daily, exclusive wash, enhances any treatment for acne. Because it contains 3 per cent hexachlorophene, it supplies *continuous* antibacterial action to help combat the infection factor. pHisoHex cleanses better than soap because it is 40 per cent more surface-active.

Used together, pHisoHex and new keratolytic pHisoAc Cream provide basic complementary topical therapy for patients with acne—to unplug follicles and to help prevent comedones, pustules and scarring.

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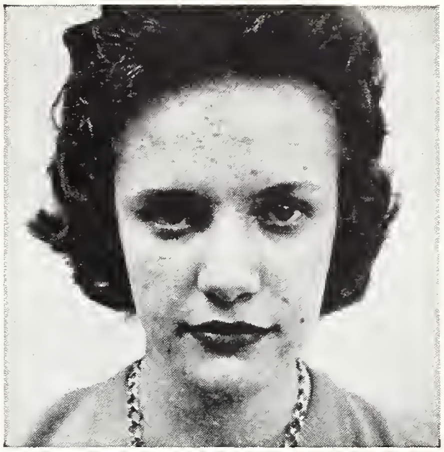
CLINICAL PHOTOGRAPHS



Acne vulgaris before treatment

For treatment at home, this patient washed her face daily with pHisoHex and kept pHisoAc on her face twenty-four hours a day.

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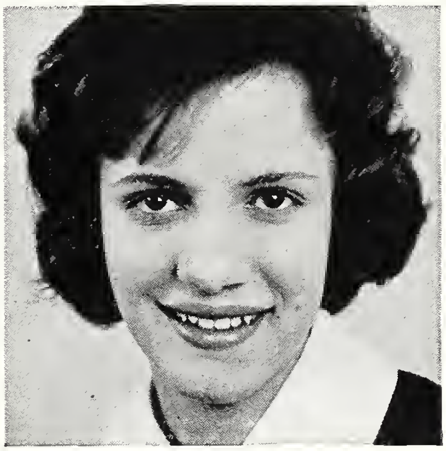

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6. Similar letter to Auxiliary.

7. Consider mailing of booklet—"Helping Those Who Need Help"—to key opinion leaders throughout state—if possible, through local society committees furnishing lists and enclosing cards.

** 8. Cooperation and coordination of "Operation Coffee Cup"—National Woman's Auxiliary project to secure letter writing by friends through coffee parties. Provide additional literature on King-Anderson bill and materials on Kerr-Mills implementation in Missouri.

9. Consider letter to membership each month or every other month with some late news, folders, talking points that physicians can use in arguing against Social Security approach. For example—fact that Socialist Party has come out for King-Anderson and assured its members that it is socialized medicine.

10. Continuing work with local committees to promote such things as distribution of literature through doctors' offices, discussions with pinpointed audiences, such as ministers and nurses who seem to tend, on a national level, to favor King-Anderson. This would be a constant effort to involve every physician in the state personally.

11. Other items to be developed as the bills proceed through Congress, hearings are set and held, etc.

12. Development of system of local news releases—not on theme that physicians oppose K-A, which is hardly news—but taking advantage of every opportunity to present the fact of opposition and the reasons for it. In cooperation with local societies, this should include releases whenever a physician speaks to an audience on the subject, committees are formed, etc.

LOCAL ACTION PROGRAMS

1. Directory of Health Resources—Completion of surveys, assembly of information, analysis of resources and needs, publication of directory. This project is certain to involve a considerable amount of rechecking, obtaining of additional information, etc., along with state level staff work to obtain information on statewide organizations.

2. After analysis of both resources survey results and case studies made last year, work with local committees to develop project to solve most pressing local need. Ideally, each local society should have some project under way, involving not only the society, but other groups in the community. This may be to obtain a county physician, build a nursing home, set up a homemakers service—anything which involves health care and the aged. Fifty-two simultaneous campaigns led by physicians to solve concrete problems would have tremendous impact on the public. Each local project would, of course, require coordination and assistance with planning, publicity, legislative matters, campaigning, etc.

3. Continue and increase the heightened publicity activity begun in 1960. (AMEF, student loans, student awards, preceptorships, etc.)

4. Student Loan Fund—active campaign to secure individual and society contributions, in addition to publicizing results, loans made, etc.

5. Student recruiting—promotion of activities locally and statewide, to recruit students to medical and paramedical careers.

6. An active campaign to secure more support and promotion of Blue Shield from individual physicians.

7. A survey of free care contributed by physicians to patients unable to pay, with subsequent publicity to public and legislature (House of Delegates resolution).

8. Document containing latest data on old age health plans, excerpts from letters of Reps. Curtis and Hall and factual material to be distributed to all members for use before public meetings (House of Delegates resolution).

9. Other projects as opportunities present.

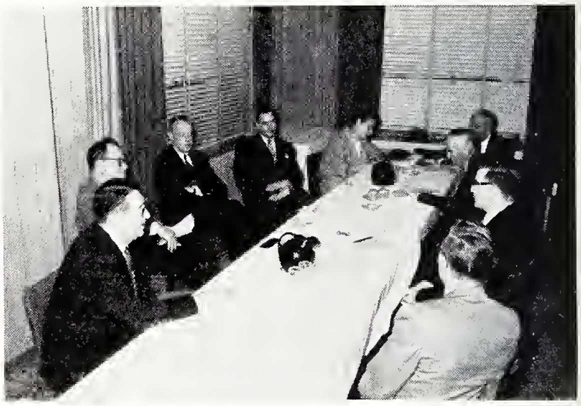
On motion of Dr. Stuart, duly seconded, this program was approved.

KING-ANDERSON BILLS

Mr. Woolley of the American Medical Association discussed the present situation on attitudes on legislation such as the King-Anderson, the general attitude for a centralized government which has developed during the last 30 years and the need for good representation at hearings in Washington.

ANNUAL SESSION

Dr. Matthews discussed recent annual sessions and possibilities of making the session more attractive to obtain attendance by a larger percentage of the membership. He outlined a suggested program for the 1962 session.



Meeting of the program planning committee was presented to the Council.

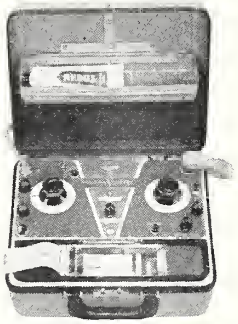
HONORARIUMS

In the discussion of the session it was pointed out that more and more organizations are paying honorariums for speakers. After discussion, on motion of Dr. Dowell, duly seconded, it was voted to empower the program chairman to pay honorariums to out of state speakers.

MSMF

Mr. O'Brien reported that a charter had been issued to the Missouri State Medical Foundation on March 31, 1961, and that an attorney is proceeding with negotiations to secure a ruling from the Internal Revenue Service so that all gifts to the Foundation will be deductible from federal income taxes of the donor. The attorney has advised that a resolution should be adopted transferring the notes due from students and the balance of the funds now in the MSMA bank account to the new foundation. On motion of Dr. Whitener, seconded by Dr. Dowell, adoption of such a resolution was voted.

It was reported that there are now 59 loans out,



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amounting to $30,015.00. The possibilities of obtaining direct donations to the Foundation were discussed.

TREASURER'S REPORT

Dr. Doyle presented the Treasurer's report reviewing the financial status of the Association. On motion of Dr. Dowell, duly seconded, the report was accepted.

PUBLIC HEALTH

Dr. Hardwicke asked that he might have an Advisory Committee to study a plan for the next two years now being developed. He said that the Division of Health would have more monies for maternal and child health activities, cancer control, heart disease, tuberculosis control, venereal disease control during the next biennium.

NURSING HOMES

Dr. Hardwicke reported that 24 nursing home institutes have been held, in most of which physicians have taken part. He said there were now 454 nursing homes in the state, 75 per cent of which were licensed, and 98 per cent had completed requirements for fire and safety. He said that while the number of nursing homes in the state had decreased, there had been an increase of 3,000 beds.

ADVISORY COMMITTEE

Dr. Hollweg reappointed Drs. Stuart, Barger and Matthews as an Advisory Committee to the Division of Health to review the new state plan.

H.R. 4998

Dr. Hardwicke reported that H.R. 4998 would amend the Public Health Service act increasing appropriations for community health services and providing greater appropriations under Hill Burton for nursing home construction on a state matching basis. On motion of Dr. Dowell, seconded by Dr. Stricker, it was voted that the legislation be supported in principle since control seemed to be in the heads of the states.

CALIFORNIA M.D.-D.O. SITUATION

Information was presented on the situation in California where the societies of the M.D.'s and D.O.'s are considering consolidation. After discussion, it was voted, on motion duly seconded, that Missouri Delegates to the AMA be instructed to reintroduce the resolution removing the word "Cult" from the AMA code of cities in defining osteopathy.

COMMITTEES

Dr. Summers appointed Dr. Peter G. Danis, St. Louis, to the Committee on Scientific and Postgraduate Work.

He appointed the following committee on Radiology and Ionizing Radiation: Drs. Wendell G. Scott, St. Louis, Chairman; Milton Shoss, Cape Girardeau; Arthur B. Smith, Kansas City; Marvin L. Napper, Springfield; Mark D. Eagleton, Clayton.

Dr. Hollweg appointed the following Committee on Corporate Practice: Drs. Donald M. Dowell, Chillicothe, Chairman; R. O. Muether, St. Louis; J. H. Summers, Lebanon; H. W. Benoit, Kansas City; John P. Ferguson, Springfield; Robert Kelley, St. Louis; Emmett B. Drescher, St. Louis; John J. Modlin, Columbia; Ralph Perry, Kansas City.

Dr. Hollweg appointed the following Committee on Public Service: Drs. R. O. Muether, Chairman; J. H. Summers, Donald M. Dowell, Byron M. Stuart, Leonard T. Furlow and Kenneth C. Hollweg.

PRESIDENT'S EXPENSE

Dr. Barger pointed out that the President of the Association must make many trips during his term of office and do many things that incur expense, and moved that the President of the Association be reimbursed for expenses incurred from the beginning of his term of office. The motion was duly seconded and passed.

VENDOR PAYMENTS

It was reported that Mr. Proctor Carter had had difficulty in excluding payment for physicians' services in x-ray, pathology, anesthesia and physiotherapy in the Vendor Program. He had asked that this be changed in view of the acceptance by the MSMA House of Delegates of the Kerr-Mills Law, since the Vendor Program is partial implementation of Kerr-Mills. On motion of Dr. Whitener, duly seconded, it was agreed to advise the MSMA representatives on the State Advisory Committee, Drs. Rowlette and Peterson to comply with Mr. Carter's request.

NEXT MEETING

It was decided that the next meeting of the Council would be held in Chillicothe in September 16 and 17.

Kenneth C. Hollweg, M.D., *Chairman*

A.M.A.

(Continued from page 839)

Chicago, and secretary, Dr. James Z. Appel, Lancaster, Pa.

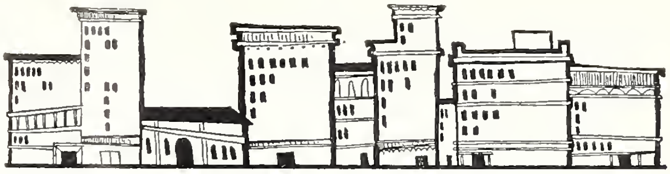
Named to the Judicial Council were Dr. Robertson Ward, San Francisco, to succeed himself, and Dr. Elmer G. Shelley, North East, Pa., to replace Dr. Pearson.

Reelected to the Council on Constitution and Bylaws was Dr. Walter E. Vest, Huntington, W. Va.

New Members of the Council on Medical Service are Dr. Charles Ashworth, Providence, R. I., succeeding Dr. Carlton Wertz Buffalo, N. Y., and Dr. Burtis E. Montgomery, Harrisburg, Ill., to succeed Dr. Charles Hudson, Cleveland.

For the Council on Medical Education and Hospitals, Dr. Dwight L. Wilbur, San Francisco, was elected to succeed Dr. John W. Cline of the same city, and Dr. Kenneth C. Sawyer, Denver, Colo., was named to succeed Dr. Guy A. Caldwell, New Orleans.

From the Medical Schools



UNIVERSITY OF MISSOURI

Visitors

Vincent G. Allfrey, Ph.D., associate professor on the staff of the Rockefeller Institute, gave the last talk in the biochemistry lecture series entitled "The Mechanism and Control of Protein Synthesis in the Cell Nucleus," in the School of Medicine auditorium on May 18, at 2 p.m. Dr. Allfrey has been with the Rockefeller Institute since 1949, and has published extensively on the role of the cell nucleus in protein synthesis and on the enzymatic composition of the nucleus, giving special attention to the methods of isolating nuclei and other sub-cellular components from tissue homogenates.

George E. Spencer, Jr., M.D., assistant professor, orthopedic surgery, of the Western Reserve University School of Medicine, visited the department of surgery on Tuesday, May 16.

Dr. Martin Roth, professor of psychological medicine at the University of Durham, England, spoke on "Scientific Inquiry in Psychiatry: Research in the Mental Disorders of Aging," Wednesday, May 17, in the Medical Center auditorium. The lecture was sponsored by the department of psychiatry. Dr. Roth is one of Great Britain's outstanding psychiatrists and is internationally known for his research in the psychiatric disorders of older persons.

Dr. Jules Henry, professor of anthropology, Washington University, visited the department of psychiatry on May 16. Dr. Henry, internationally known for his work in the anthropological analysis of family, tribal and institutional patterns, discussed his observations of the families of psychotic children in relation to certain patterns of child-rearing which cause subsequent emotional disorders in the children. He also participated in a meeting of the Child Development Center conference during his visit here.

Dr. Eugene Brody, professor and chairman of the department of psychiatry at the University of Maryland School of Medicine, an alumnus of the University of Missouri School of Medicine, visited the department of psychiatry and discussed the program of medical education in the department with faculty members in psychiatry.

Dr. John M. Howard, professor of surgery, Hahnemann Medical College, visited the department of surgery May 11 and 12, during his stay as guest speaker at the Sixth Annual Spring Clinical Conference. Dr. Howard lectured on "Steroid Therapy in Surgery," and participated in Surgical Rounds and instruction of the surgical house staff.

Dr. Charles Lockhart, Springfield, Mo., was guest lecturer at the department of surgery weekly Tumor Conference April 19. Dr. Lockhart lectured on "The Diagnosis of Breast Lesions," participated in surgical rounds and instruction of the surgical house staff.

Appointments and Elections

Dr. Jack M. Martt, associate professor of medicine, and Dr. Roland P. Ladenson, clinical associate professor of medicine, have been elected Fellows of the American College of Physicians, an organization of physicians who are specialists in internal medicine and related sub-specialities. Both Dr. Martt and Dr. Ladenson are diplomates of the American Board of Internal Medicine, one of the requirements for appointment as a Fellow of the College of Physicians.

Dr. Gwilym S. Lodwick, professor and chairman of the department of radiology, and Mr. George F. Koenig, assistant professor of radiologic technology and chief technician, attended the third annual convention of X-Ray Technicians in Montreal, June 23-29. Mr. Koenig was in charge of workshop sessions and appeared on a panel on education. Also at the meeting, Mr. Koenig received the honor of becoming a Fellow of the American Society of X-Ray Technicians and presided over the convention board meetings, in his capacity as Chairman of the Education Committee. Dr. Lodwick was recently appointed as Trustee of the American Registry of X-Ray Technicians.

Trips and Talks

Dr. Vernon E. Wilson, dean of the School of Medicine and director of the University Hospital, gave a talk on "Self Improvement" at an annual state meeting of the State of Missouri Association of Medical Records Librarians, held at the Daniel Boone Hotel, May 24.

Dr. M. D. Overholser, professor of anatomy, and chairman of the department, attended the MEND symposium in New London, Conn., April 17-19. The topic of discussion was "Submarine Medicine and the Habitability of Confined Environments."

Dr. Thomas D. Luckey, professor and chairman of the department of biochemistry, gave three talks at the University of Nebraska on May 16, entitled, (1) "Hormology in Micro-organisms," (2) "Biochemistry and Nutrition of Germfree Animals," and (3) "Germ-free Research and Hormology."

Dr. Frank B. Engley, professor and chairman of the department of microbiology, reported on the progress of research on "The Effects of Microbial Toxins of Heart Tissue Culture Cells," at a meeting of the Missouri Heart Association at the Daniel Boone Hotel, Columbia, May 26.

Dr. Herbert S. Goldberg, associate professor of microbiology, visited the Biometrics Laboratory of National Heart Institute for aid in analysing research data in Bethesda, Md., June 5-9. He also visited the Electron Microscopy Laboratory of the National Institute of Dental Research and the Walter Reed Army Institute of Research, Leptospirosis Reference Laboratory. Dr. Goldberg also lectured on "Antibiotic Susceptibility Testing for Post-Graduate Course in Diagnostic Veterinary Bacteriology and Parasitology," at the School of Veterinary Medicine, June 13.

Dr. James T. Barrett, associate professor of microbiology, lectured on "Serology as a Diagnostic Tool," for the Veterinary Short Course in Bacteriology, June 14, before a group of 20 veterinarians.

Dr. D. P. Durand, assistant professor of microbiology, attended the inauguration of President Schechter at Tarkio College, Tarkio, Missouri, representing Guilford College, North Carolina. The inauguration was held on May 27.

Dr. Michael H. Ivey, assistant professor of microbiology, attended a symposium on Parasite Immunology at a meeting sponsored by the Mid-West Society of Parasitology, at Ohio State University, June 12 through 14.

Dr. Robert L. Jackson, professor and chairman of the department of pediatrics, participated in a panel, "Some Practical Points on the Management of Diabetes," and presented a talk on "Management of the Child With Diabetes Mellitus," at a meeting sponsored by the Diabetes Association of Greater Cleveland, Inc., in Cleveland, Ohio, May 24.

Dr. James E. Randall, associate professor of physiology and biophysics, was a participant in the Fourth Annual Seminar on Medical Teaching, sponsored by the Association of American Medical Colleges, June 11 through 17, in Highland Park, Illinois.

Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department, presented a paper entitled "Quantification of Certain Trends in Attempted Suicide" on June 8 at the Third World Congress of Psychiatry in Montreal, Canada. Coauthors of the paper with Dr. Weiss are: Dr. Nicholas Nunex, chief resident in psychiatry at the Malcolm Bliss Mental Health Center, St. Louis, and Dr. K. Warner Schaie, assistant professor of psychology at the University of Nebraska, Lincoln, Neb. Dr. Schaie was formerly visiting assistant professor of clinical psychology in the department of psychiatry at the University of Missouri. Dr. Weiss was also an invited discussant at a meeting June 1 in St. Louis at the Jewish Hospital where Dr. Erwin Stengel, professor of psychiatry at the University of Sheffield, England, and an international authority on suicide and attempted suicide, discussed current research in suicide and attempted suicide. Dr. Eli Robins, professor of psychiatry at Washington University was also a discussant.

Dr. Fernando Tapia, clinical assistant professor of psychiatry, spoke to the Boone County Mental Health Association May 23, on the psychiatric needs of children. Approximately 60 Association members attended. Dr. Tapia also spoke to the Sacred Heart Home and School Association in Columbia, May 18 on the "School and Mental Health," conveying the idea that the school and the community that made up the school could involve themselves more consciously in the emotional growth processes of their students.

Dr. Gwilym S. Lodwick, professor and chairman of the department of radiology, and Dr. Theodore E. Keats, professor of radiology, attended the meeting of The Association of University Radiologists at Stanford University School of Medicine in Palo Alto, California. Activities included scientific sessions and discussions and a tour through the Stanford Department of Radiology. The meeting was held May 18 through 22. Dr. Keats also served as chaperone for the trip to Eli Lilly Laboratories in Indianapolis early in June. Medical students and wives attended.

Dr. Donald Q. Cochran, assistant professor of radiology, Darrell Wood, R.T., George F. Koenig, R.T., Lillian Parker, R.T., Mel Ravenscraft, x-ray technician, and Jack-Lynn Hampton, R.T., attended the meeting of the Missouri State Society of X-Ray Technicians in Jefferson City, April 21 and 22. Dr. Cochran gave a lecture on "Cine Radiography" and Mr. Koenig served an a panel and presided over a scientific program. Dr. Cochran also spoke recently on two occasions to a Columbia Defense Class at Jefferson Junior High School on Aspects of Radioactive Fallout. Dr. Henry A. McQuade, associate professor of radiobiology, attended a meeting of the Society of Nuclear Medicine, June 13 through 16, in Pittsburgh, Pa.

Dr. John J. Modlin, professor and chairman of the department of surgery, and Dr. Carl H. Almond, assistant professor of surgery, attended a meeting of the Mineral Area County Medical Society held May 25 at Farmington, Mo., where they spoke on "Surgery for Occlusive Vascular Disease," and discussed the progress of the department of surgery at the University of Missouri Medical Center. On May 25, 1961, Dr. Almond spoke to the State of Missouri Association of Medical Record Librarians on the subject of "Surgical Diseases" with slides for illustration, at the Medical Center auditorium.

Dr. Ian M. Thompson, associate professor of surgery (urology), attended the Reed Nesbit Society Meeting in San Diego, on May 20. He also presented a movie on incontinence and participated on a panel discussion on the subject of incontinence at the AUA Meeting in Los Angeles, May 21. Dr. Gilbert Ross, Jr., assistant instructor in surgery also attended the AUA Meeting. From May 24 to 26, 1961, Dr. Thompson attended the Alaska Medical Association Meeting in Sitka, Alaska, where he presented papers and an exhibit on prostatism incontinence and surgical management of these diseases.

Dr. M. Pinson Neal, professor emeritus of pathology, attended the annual meeting of the Committee on Scientific and Post-graduate work of the Missouri State Medical Association in Jefferson City, April 30, 1961. The group planned for the year's activities and the 1962 program of the Missouri State Medical Society to be held in St. Louis March, 1962.

Drs. Robert L. Jackson, professor and chairman of the department of pediatrics, Clement E. Brooke, associate professor, Constantine S. Anast, associate professor, Fikri M. Hanna, assistant professor, Harold Lischner, assistant professor and James K. Mann, instructor in pediatrics, attended the annual spring pediatrics meetings sponsored by the American Pediatrics Society and Society for Pediatric Research in Atlantic City, New Jersey, May 2 to 5. While in Atlantic City, Dr. Jackson also attended the first annual meeting of a new society, the American Society for Clinical Nutrition on April 29, and a meeting of the National Research Council on May 1. Dr. Jackson gave a talk on "Nutritional Management of Children" at a meeting of the Illinois State Pediatric Society in Center, Ill., April 23, and participated in a panel discussion on "The Present Status of Breast Feeding," and gave a luncheon talk on "Reflection of Modern Medicine" at a meeting of the Illinois State Medical Society on May 16, 1961.

Dr. David G. Hall, assistant professor of obstetrics-gynecology and acting chairman of the department, was moderator on two panel discussions, "Habitual Abortion" and "Residency Training in Obstetrics-Gynecology," at a meeting of the American Society for the Study of Sterility and the American College of Obstetricians and Gynecologists, in Miami Beach, Fla., from April 19 to 28.

Dr. Elmer H. Van Dyke, assistant instructor in obstetrics-gynecology, attended the meeting of the American Society for the Study of Sterility and the American College of Obstetricians and Gynecologists in Miami Beach from April 19-28, 1961.

Dr. James M. A. Weiss, associate professor and acting chairman of the department of psychiatry, attended the annual meeting of the American Psychiatric Association May 8 through 12. While there, he participated as a discussant in a Round Table relating to the psychiatric problems associated with aging. He also participated in a meeting of the chairmen of departments of phychiatry of all medical schools in the U. S. and Canada, and in a meeting of the Committee on Aging of the Association. Also at the general meeting of the Association, Dr. George J. Lytton, clinical associate professor of psychiatry was elected a Fellow of the American Psychiatric Association.

Dr. David Davis, assistant professor of psychiatry, gave a lecture followed by participation in two workshops as resource person at Northwest State Teachers College in Maryville, Mo., the topic of discussion being, "A New Look in Alcohol Education." Dr. Davis also gave a one hour lecture and participated in a question-answer session on the historical development of the concept of the therapeutic community in psychiatry and a description of the psychiatry ward at the Medical Center at a meeting of the Missouri Physical Therapy Association held April 30,

(Continued on page 876)

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actor in nearly every illness or disease state”[1]

1. Youmans, J. B.: Am. J. Med. 25:659 (Nov.) 1958

iac diseases “Who can say, for example, whether the patient chronically
ı myocardial failure may not have a poorer myocardium because of a moderate
ıcy in the vitamin B-complex? Something is known of the relationship of vitamin
ıe intercellular ground substance and repair of tissues. One may speculate upon
ects of a deficiency of this vitamin, short of scurvy, upon the tissues in chronic
.”[2] 2. Kampmeier, R. H.: Am. J. Med. 25:662 (Nov.) 1958.

ritis “It is our practice to prescribe a multiple vitamin preparation to patients
heumatoid arthritis simply to insure nutritional adequacy . . .”[3]
z-Herlihy, L: Lahey Clinic Bull. 11:12 (July-Sept.) 1958.

stive diseases Symptoms attributable to B-vitamin deficiency are com-
observed in patients on peptic ulcer diets.[4] Daily administration of therapeutic
ins to patients with hepatitis and cirrhosis is recommended by the National
rch Council.[5] 4. Sebrell, W. H.: Am. J. Med. 25:673 (Nov.) 1958. 5. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition. National Academy of Sciences and National Research Council, Washington, D. C., 1952, p. 57.

enerative diseases “Studies by Wexberg, Jolliffe and others have indi-
that many of the symptoms attributed in the past to senility or to cerebral arterio-
sis seem to respond with remarkable speed to the administration of vitamins,
ularly niacin and ascorbic acid. These facts indicate that the vitamin reserve of
persons is lowered, even to the danger point, more than is the case in the average
ican adult.”[6] 6. Overholser, W., and Fong, T.C.C. in Stieglitz, E. J.: Geriatric Medicine, 3rd edition, J. B. Lippincott, Philadelphia, 1954, p. 264.

ctious diseases Infections cause a lowering of ascorbic acid levels in the
a; and the absorption of this vitamin is reduced in diarrheal states.[7] 7. Goldsmith, G A.:
e on Vitamin C. The New York Academy of Sciences, New York City, Oct. 7 and 8, 1960. Reported in: Medical Science 8:772 (Dec.10) 1960.

etes Diabetics, like all patients on restricted diets, require an extra source
amins.[8] “Rigidly limiting the bread intake of the diabetic patient automatically
ıates a large amount of thiamin from the diet. . . . There is some evidence of
erence with normal riboflavin utilization during catabolic episodes.”[9]
G. G.: Diseases of Metabolism 4th edition W. B. Saunders, Philadelphia, 1959, p. 812. 9. Pollack, H.: Am. J. Med. 25:708 (Nov.) 1958.

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in the auditorium of the University of Missouri Medical Center.

Dr. Rodman Kabrick, assistant professor of clinical psychology, attended the annual regional meeting of the Midwestern Psychological Association May 4 through 6.

Dr. Donald Q. Cochran, assistant professor of radiology, gave a 45 minute talk on the current status and uses of cine-radiology, at a meeting of the Missouri Society of X-Ray Technicians held in Jefferson City April 21. Around 40 x-ray technicians attended the 29th annual meeting. Dr. Cochran also gave a lecture on "Medical Aspects of Radioactive Fallout Including Protective Measures to Be Taken Against Fallout," to the Columbia Civil Defense Group, April 24 in Jefferson City.

Dr. Hugh E. Stephenson, Jr., professor of surgery, and Dr. Robert E. Paulette, instructor in thoracic surgery, attended the 41st Annual Meeting of the American Association for Thoracic Surgery held in Philadelphia, Pennsylvania, April 24 through 26.

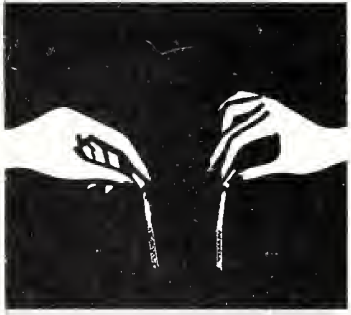
Dr. Carl H. Almond, assistant professor of surgery, attended the MEND Symposium held in New London, Conn. from April 17 to 19. "Submarine Medicine and the Habitability of Confined Environments," was the topic of discussion.

Dr. Karl Moedl, assistant instructor in surgery and chief surgical resident, attended the Chief Surgical Resident's Conference "Surgery of Trauma" in Milwaukee, Wis., April 19 through 23.

Dr. Kenneth K. Keown, professor of surgery (anesthesiology), attended the American Board of Anesthesiology meeting in Kansas City, April 16-21 as an oral examiner, and the Wisconsin State Medical Society meeting in Milwaukee, May 4 and 5, where he was guest speaker on "Anesthesia for Intracardiac Surgery."

Dr. Garth S. Russell, director of the Lions Eye Tissue Bank and research associate in surgery (ophthalmology), spoke at Joplin, Mo., May 5, at a meeting announcing the opening in Joplin of two tissue-collecting substations of the Lions Eye Tissue Bank of the Medical Center. The meeting was a joint meeting of the Lions Club of Southwest Missouri and the Joplin Blind Association.

Dr. J. M. Martt, associate professor of medicine, gave a talk on "Diagnosis of Common Con-



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genital Heart Defects" to the staff at the Memorial Hospital in Jefferson City, and to the Cole County Medical Society on May 10.

Dr. Frank B. Engley, professor and chairman of the department of microbiology, attended the national meetings of the American Society for Microbiology in Chicago April 23 to 27. Dr. Engley was convenor of a session on "Etiology of Disease," presented a paper with Raymond Gray on "Interrelationships of Staphylococcal Hemolysins," and represented the Eastern Missouri Branch of the A.S.M. as national councilor at the Chicago meetings. Dr. Engley also attended the Missouri Public Health Association Meeting May 7-10 in Kansas City, Mo., as chairman of the Laboratory Section, and the National Science Fair in Kansas City, May 10, where he was a judge of microbiology for the American Society for Microbiology.

Dr. Herbert S. Goldberg, associate professor of microbiology, attended the meeting of the American Society for Microbiology April 24-27 in Chicago, and the meetings of the Laboratory Section of the Missouri Public Health Association May 9, in Kansas City.

ST. LOUIS UNIVERSITY

Golden Jubilarians

Graduates of St. Louis University's 1911 class were honored during the University's 143rd commencement exercises Saturday June 3 at 10:00 a.m. in Kiel Auditorium.

Among the 1911 graduates who attended the golden anniversary reunion program were: Dr. Ralph A. Kinsella, 3720 Washington; Dr. Charles R. Eyermann, 634 North Grand Blvd.; Dr. Helmuth Kramolowsky, 546 Sheffield; Dr. Lawrence A. Ryan, East St. Louis, Illinois; Dr. George L. Sharp, St. Petersburg, Florida, and Dr. Charles L. Garris, Eldorado, Illinois.

Nursing Refresher

Mr. John B. Warner, Jr., director of Firmin Desloge Hospital of Saint Louis University, opened the orientation program, which was a refresher course for nurses, sponsored by the University's Department of Nursing Service.

The ten day program (June 5 to 16) held at Desloge Hospital included lectures from nine University faculty members and one resident phy-

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sician. Participants and their subjects were: Dr. Francis X. Paletta, associate professor of clinical surgery, "Recent Developments in the Care of the Severely Burned Patients"; Dr. Henry E. Oppenheimer, assistant professor of clinical medicine, "New Concepts in the Care and Treatment of the Diabetic Patient"; Dr. Jack C. Tippett, instructor in orthopedic surgery, "Orthopedic Injuries"; Dr. C. Rollins Hanlon, surgeon-in-chief, professor of surgery and director of the department, "Principles and Treatment Involved in the Care of the Patient Having Cardiac Surgery"; Dr. Thomas Mier, obstetrician-in-chief, assistant professor of clinical gynecology and obstetrics, "Pregnancy and Its Complications"; Dr. Edmund A. Smolik, associate professor of clinical surgery, "Medical and Surgical Aspects of the Neurological Patient"; Dr. George E. Gantner, assistant professor of pathology, "Infections in the Hospital"; Dr. Edwin C. Neville, resident in surgery and fellow in cardiovascular surgery, "Cardiac Emergencies and Emergency Measures"; Dr. Robert Dean Mattis, associate professor of clinical ophthalmology and executive secretary of the department, "Newer Concepts in the Treatment of Diseases of the Eye," and Dr. A. P. Dermott Smith, assistant professor of neurology and psychiatry and executive secretary of the department, "The Psychological Aspect of Nursing Care."

Elections

Dr. Grayson Carroll, professor of clinical urology at the St. Louis University School of Medicine and head of the department of urology at St. John's Hospital, has been named president-elect of the American Urological Association.

Dr. Carroll will attend eight district meetings throughout the nation this year, and will preside over the association's national meeting to be held in St. Louis in 1963.

He formerly served as treasurer of the Association and is currently president of the board of urology and chairman of the residency review committee on urology.

Dr. Carroll has been a member of the University's medical faculty for 36 years. He is also consultant urologist at City Hospital.

Dr. Carroll's research activities at the University are concerned with infections of the kidney and bladder involving new antibiotic drugs.

Dr. C. Rollins Hanlon, director of the depart-

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ment of surgery, has been elected to the American Board of Surgery for an eight year term. He also has been named a member of the Surgical Forum of the American College of Surgery.

Meetings

Dr. Vallee L. Willman, assistant professor of surgery, delivered a paper entitled "Digitalis in Experimental, Surgically Induced Heart Block" before the American College of Chest Physicians meeting in New York June 25. The paper was coauthored by Dr. Theodore Cooper, assistant professor of surgery; Dr. C. Rollins Hanlon, director of the department of surgery, and Dr. Hector S. Howard, fellow in cardiovascular surgery.

The St. Louis University School of Medicine's Section of Nuclear Medicine will present two summer postgraduate courses for public health officials and personnel associated with radiation health research, according to Dr. James W. Colbert, Jr., Dean.

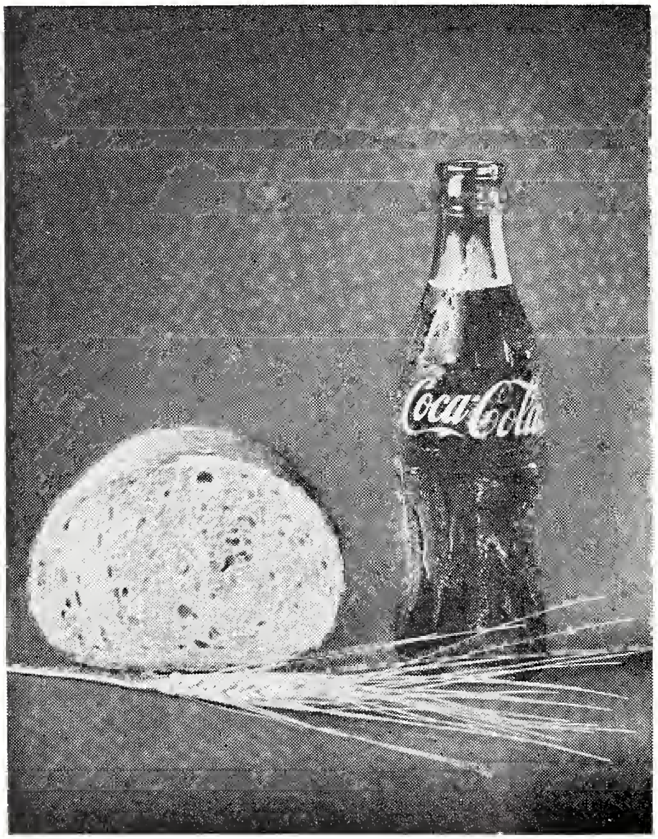
The summer program, directed by Dr. George E. Thoma, Jr., assistant professor of clinical medicine and director, Section of Nuclear Medicine, included a course on "Medical Aspects of Radiological Health" from July 10 to August 4, and one on "Epidemiology of Radiation Injury" from August 7 to August 18. Sessions will convene in Miller Hall of Firmin Desloge Hospital.

Visiting nuclear scientists and the University faculty will give course instruction covering occupational, environmental, accidental and medical exposure to radiation.

Course instruction is designed for federal, state and municipal health officers who have administrative and technical responsibilities in radiological health. Purpose of the course is to provide participants with the background of knowledge necessary for appreciation of the academic, administrative and technical problems associated with the field.

The program is presented with the cooperation of the committee on the teaching of radiobiology of the School of Medicine, the Department of Physics of the College of Arts and Sciences with the support and assistance of the Division of Radiological Health of the Public Health Service.

Dr. Kyoshi Seki, research associate in the physiology department, attended the annual meeting



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of the American College of Angiology held in New York June 23 to 25.

Dr. John P. Wyatt, professor of pathology, and Vernon Fischer, research associate, presented an exhibit entitled, "Analytic and Anatomic Methods in Pulmonary Disabilities" at the meetings of the American Thoracic Society in Cincinnati.

Dr. E. A. Doisy, Jr., professor of biochemistry, attended the 1961 general meeting of Contractors in the Radiation Preservation of Food Program on June 6, 7 and 8 at the Shoreland Hotel, Chicago. The meeting, sponsored by the Quartermaster and Surgeon Generals of the United States Army and by the National Science Foundation, included scientists from laboratories throughout the United States. The nutritionists, physiologists and biochemists involved in the symposia examined past research and planned the course of future research to establish the safety of irradiated foods for human diets. Dr. Doisy spoke on the findings at St. Louis University on hemorrhagic syndrome specifically dealing with the factors that affect hemorrhages in the rat.

Meeting

Dr. Jerome T. Y. Shen, assistant professor of clinical pediatrics and director of the department of pediatrics at St. Louis City Hospital, delivered a lecture on "Medical Care of the Adolescent" before the Missouri Chapter of the American Academy of Pediatrics, which met in Columbia, Mo., May 10.

Honors

Sixteen members of the St. Louis University School of Medicine graduating class were recipients of achievement awards and certificates at the annual senior banquet held at the Congress Hotel, May 29. The presentations were made by Dr. James W. Colbert, Jr., Dean of the School of Medicine.

Beaumont awards went to five medical students for research conducted during one of the four years of the medical curriculum. Award winners were selected on the basis of the research papers written, scholastic excellence and outstanding achievement. The annual competition is named in honor of Dr. William Beaumont, first professor of surgery at the St. Louis University School of Medicine, who has been acclaimed as the American making the greatest contribution to modern physiological concepts.

Dr. Daniel M. Philbin, Milford, Conn.; Dr. Peter J. Shearr, Orinda, Cal., and Dr. Albert A. Tassi, Jr., Monrovia, Cal., shared the first prize award of $500 for their joint paper entitled "Digitalis Potentiation of Thiopental Induced Bigeminy in the Dog." The research was conducted in the department of surgery under the direction of Dr. Vallee L. Willman, assistant professor of surgery.

The other two medical school seniors who tied for second place in their research studies in the Beaumont competition received $100 each. They were: Dr. Raymond L. Tremblay, Toledo, Ohio, and Dr. Richard T. Torchia, 3814a McCree, St. Louis. Dr. Torchia's research project was entitled "Chromatographic Separation of Brain Lipids From Chicks Made Deficient in Vitamin E." His research was conducted under the direction of Dr. Louis L. Tureen, associate professor of clinical neurology and psychiatry, and Dr. Richard S. Gordon, director of research at Monsanto Chemical Company.

Dr. Tremblay's research paper entitled "Vanadium as an Inhibitor of Cholesterol Biosynthesis" covered a comparative study of the effects of Vanadium on cholesterol biosynthesis of animals. His research was conducted in the department of internal medicine under the direction of Dr. Daniel L. Azarnoff, assistant professor of internal medicine, and Dr. George L. Curran, associate professor of internal medicine.

The prize winning papers were selected by a committee headed by Dr. Edward A. Doisy, Jr., professor of biochemistry.

Eleven other medical school seniors were honored. Dr. Phillip Carr, 101 E. High St., Eldon, Mo., was the recipient of an honorary scroll and a $100 bond presented by the Missouri State Medical Association for highest scholastic excellence.

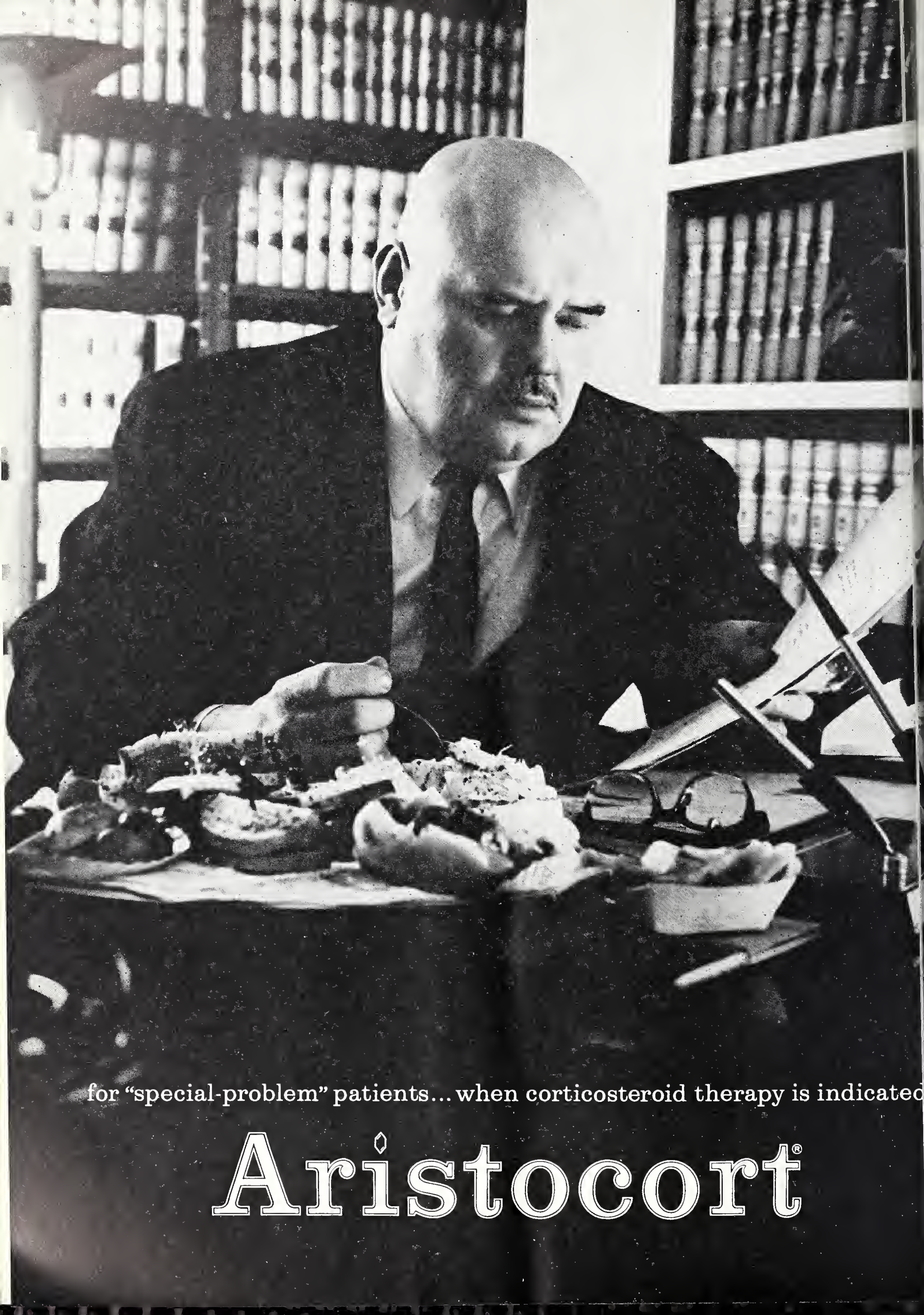
Mosby award recipients were: Dr. Thomas Eggleston, 3815 Holly Hills Blvd., St. Louis; Dr. Scott C. Guth, 6727 W. 13th Place, Phoenix, Ariz.; Dr. Kenneth D. Rashid, Sayre, Okla., and Dr. Robert E. Woods, Jr., Mobile, Ala.

Merck Manual Awards for outstanding achievement went to: Dr. Carroll E. Howard, Whitesville, Ky., and Dr. Charles G. Wieland, 3249 Audubon, E. St. Louis, Ill.

Grant

Dr. Pietro O. Bramante, assistant professor of physiology, has been awarded a grant renewal by the United States Public Health Service for $8,395. The award will support an investigation into the energy exchanges and respiratory metabolic phenomena of albino rats and hamsters in relationship to their endocrine function, espe-

(*Continued on page 884*)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No patient developed voracious appetite on triamcinolone. Preferable for the overweight person whose appetite is undesirably stimulated by other steroids. (Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

SPECIAL PROBLEM: EDEMA

Since it does not produce edema, triamcinolone is useful in rheumatoid arthritis patients with cardiac decompensation who need steroid therapy. (Hollander, J. L.: *J.A.M.A.* 172:306 [Jan. 23] 1960.)

SPECIAL PROBLEM: HYPERTENSION

Triamcinolone may be included among the currently available antirheumatic steroids having the least tendency to cause sodium retention. (Ward, L. E.: *J.A.M.A.* 170:1318 [July 11] 1959.)

Hypertension did not result from triamcinolone therapy. Existing hypertension was reduced sometimes. This may have been due to lack of sodium retention. (Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of rheumatoid arthritis, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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Honor

Dr. Carl F. Vohs, associate professor of clinical orthopedic surgery, was honored by the St. Louis College of Pharmacy at its annual awards dinner held May 20. A member of the executive committee of Missouri Medical Service (St. Louis Blue Shield plan), Dr. Vohs was chosen "Physician of the Year." He has been on the St. Louis University medical faculty for more than thirty years. Dr. Vohs was founder and first president of the Blue Shield organization. He also was a founder and vice president of the St. Louis Blue Cross plan.

LEGISLATION

(Continued from page 810)

dealing with State Mental Health, the Division of Health and the School of Medicine of the University of Missouri were passed in improved form, although not in the amounts that were requested.

Bills Not Passed

S. B. 82. Public Hospital District. The act provided for the creation of a public hospital district in Jackson County. Public hospitals, public clinics and other public health facilities would have come under the supervision of a board of trustees composed of eight persons elected by the qualified voters of Jackson County, including Kansas City. Thus the Kansas City General Hospital and the Jackson County Hospital would have come under the jurisdiction of the board. Taxes would have been levied by the Hospital District at a rate not to exceed 50 cents per $100 valuation of real and tangible personal property.

S. B. 359. Optometry. This act provided for changes in the definition of optometry, restrictions against price advertising of eye glasses and administrative changes in the state board of optometry. Two hearings were held by the Senate Committee on Public Health which resulted in the drafting of a substitute bill which dealt mainly with price advertising and board administration changes.

H. B. 498. Funds of All State Boards. This act provided that 74 funds, including the "Healing Arts Funds," would be abolished. All funds would have been transferred to General Revenue. All appropriations would have been handled in a different manner than at present.

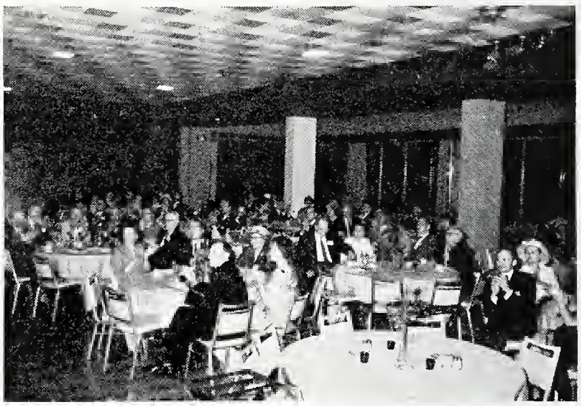
H. B. 633, 690. Implementation of Kerr-Mills Act. A subcommittee of the House Committee on Public Health considered both bills. A price tag of $107,000,000 for the biennium was given by the State Budget Department and the State Division of Welfare as the ultimate cost of the acts.

S. B. 320. To license an individual physician.

MISSOURI ACADEMY

(Continued from page 816)

May 7. The scientific program, acceptable for 4½ hours of Category I Credit, began at 1:30 p.m. and continued through the afternoon. Following a social hour and dinner in the evening an interesting talk was given by E. M. Litin, M.D., Consultant, Section of Psychiatry, Mayo Clinic, on "The Spoiled Brat—The Problem Parent." Dr. Walter Gunn was program chairman for the session.



Doctors and their wives enjoyed the banquet festivities.

The Annual Spring Dinner meeting of the Kansas City Chapter of the Missouri Academy of General Practice was held at the Wishbone Restaurant, Thursday evening, May 25, in Kansas

(Continued on page 887)

Clinically Proven

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**Outstandingly Safe
and Effective**

for the tense and
nervous patient

1 simple dosage schedule relieves anxiety dependably — without the unknown dangers of "new and different" drugs

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5 does not muddle the mind or affect normal behavior

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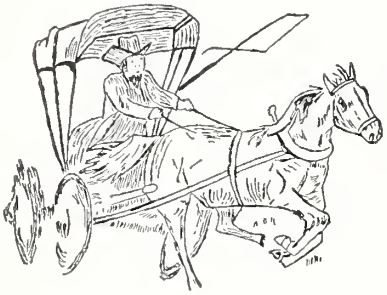
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

The reports of the United States Public Health Service on the threatened epidemic of pellegra in the Southern states due to an insufficient quantity of nutritious food, has induced President Harding to call for an active campaign to prevent such a disaster. Governors and health officers in several Southern states deny the accuracy of the statement of the Public Health Service, but that denial does not refute the truth of conditions that have been known to physicians, especially to pediatricians, for many years.

The Medical Association of the Southwest will hold its annual session in Kansas City October 25-28. The Missouri Valley Medical Association will hold its annual session at the same time and place, the two bodies combining their programs so that the occasion promises to be one of unusual interest to the members. Dr. E. H. Skinner, Kansas City, Mo., is president of the Southwest Medical Association and Dr. W. O. Bridges, Omaha, Neb., is president of the Missouri Valley Medical Association.

The board of curators of the State University has taken a definite stand in favor of establishing a four year course in medicine at the university. The board will prepare a bill for presentation at the next session of the legislature in 1923 to authorize and appropriate money for the establishment of a state hospital at Columbia to be operated in conjunction with the medical school.

Missouri has one physician for every 575 persons. The ratio in St. Louis is one to every 450, while in Kansas City the ratio is one physician to every 350 persons. In the United States the ratio is one physician to every 750 persons. Over 70 per cent of the counties in Missouri are without hospitals, there being only one hospital bed for every 432 persons throughout the state. In St. Louis there is a bed for every 171 persons. Ninety per cent of the hospital beds are centered in St. Louis, Kansas City and St. Joseph. According to these figures, which have been prepared by Dr. Guy L. Noyes, Dean of the School of Medicine of the State University, 60 per cent of the people in Missouri have difficult access to only one-tenth of the beds in our hospitals.

A postgraduate program on obstetrics for district medical societies in the southwest is proposed by Dr. Geo. C. Mosher of Kansas City, a member of the Council on Medical Education of the Association and chairman of the Section on Obstetrics, Southern Medical Association. The first session was held at a recent meeting of the North Missouri Medical Society at Brookfield. Papers covering some of the principal points in obstetrics were given by specialists and a forum held with a half dozen other topics proposed for general discussion after the set program.

TWENTY-FIVE YEARS AGO

At St. Louis City Hospital No. 1, the treatment of arthritis with mecholyl iontophoresis has been used and clinically evaluated. Sixty-seven per cent of the arthritis patients show good results, 25 per cent fair and 8 per cent poor. Mecholyl iontophoresis has been discussed, not with the belief that it is a cure for arthritis, but that it is of distinct service as an adjunct in treatment, especially in the chronic case.

On July 1, 1936, Dr. W. McKim Marriott resigned as Dean of Washington University Medical School, Professor of Pediatrics, and Physician-in-Chief of the St. Louis Children's Hospital to become Dean of the Medical School and Director of Medical Research at the University of California. The departure from St. Louis of such a distinguished figure in medicine prompts calling attention to his career.

The St. Louis Medical Society has in recent months inaugurated a campaign of publicity designed to call attention, among other things, to the poor quality of milk furnished the townsfolk, the insanitary hovels which are called home by many, the menace of overflowing garbage cans, the danger of large and ungoverned rat colonies.

The Receiving Hospital of the Kansas City

General Hospital, Kansas City, Missouri, was opened July 6. In this building are all necessary facilities for emergency care and temporary housing. All patients not admitted to the General Hospital through the Outpatient Department will be admitted through the Receiving Hospital.

Approximately two hundred attended the annual basket picnic of the St. Louis County Medical Society which was held at the home of Dr. John O'Connell, Overland, on June 28.

Soviet gynecologists have convinced the Kremlin that sixteen years of easy abortion on a nationwide scale have impaired the health of hundreds of thousands of Russian women, however much it achieved in realizing Communist ideals of equality of the sexes and a single Soviet standard of morality.

TEN YEARS AGO

F. J. Longfield, M.D., Lathrop, was honored on May 25 on the completion of fifty years of practice in Lathrop. The mayor of Lathrop declared the day "Dr. F. J. Longfield Day."

A N. Arneson, M.D., St. Louis, has been elected president of the St. Louis Medical Alumni Association.

D. B. Elrod, M.D., Cape Girardeau, was the guest speaker at an annual Future Farmers of America banquet at Malden on May 15.

First award of the Congressional Medal of Honor to an Army Medical Service man during the Korean conflict was made to the widow of Private First Class Richard G. Wilson, of the Medical company, 187th Airborne Infantry Regiment. Private Wilson was from Cape Girardeau.

J. R. Bridges, M.D., Kahoka, was the only representative present of the class of 1888 of the Keokuk Medical College at a reunion of the Medical College's Alumni Association held at the Keokuk, Iowa, Country Club on June 18.

W. A. Bloom, M.D., Fayette, and Ira H. Lockwood, M.D., Kansas City, addressed the first meeting of the Missouri State Medical Secretaries and Assistants Society at Fayette, June 10. The society was organized at Kansas City on April 22.

MISSOURI ACADEMY

(Continued from page 884)

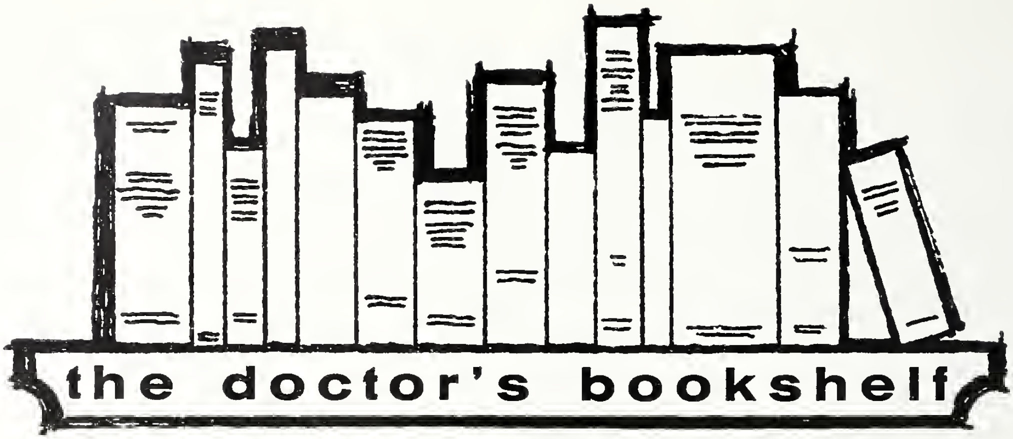
City. The session was presided over by Dr. Frank O'Connell, outgoing president.

Dr. Cecil Leitch, Blue Springs, President of the MAGP, was honored as the "family physician of the year" and presented a plaque of suitable citation by Dr. Nicholas Jaime, a former recipient of the award. Dr. Leitch was particularly commended for his tireless efforts to promote interest nnd pride in the field of general practice.

Dr. Robert Laffoon, a graduate of the University of Missouri Medical School in 1960 and interning at Kansas City General Hospital, 1960-1961, received a $1,000 Mead Johnson General Practice Residency award. The award was presented by Dr. I. Charles Fowler, incoming President of the Kansas City Academy.

The principle address of the evening was given by Dr. C. Arden Miller, Dean of the University of Kansas School of Medicine.

New officers elected were: Dr. R. Stacy Long, President-Elect; Dr. R. Glenn Elliott, Secretary, and Dr. Richard L. Owens, Treasurer. Directors elected were: Dr. William C. Ganley, Dr. C. D. O'Connor, Dr. R. D. Dwyer, Dr. George Williams, Dr. Richard Bowles and Dr. William F. Bell.



BOOK REVIEWS

Therapeutic Radiology, by William T. Moss, M.D., Assistant Professor of Radiology, Northwestern University School of Medicine, Department of Radiology, Chicago, Illinois; Director, Department of Therapeutic Radiology, Chicago Wesley Memorial Hospital; Chief, Department of Therapeutic Radiology, Veterans Administration Research Hospital, Chicago, Illinois. Foreword by Lauren V. Ackerman, M.D. The C. V. Mosby Company, 1959, St. Louis. Price $12.50.

The first chapter of this volume is an introduction to clinical radio-therapy including clinical guides to dosage, radiobiological concepts in therapeutic radiology, clinical factors governing technics, and supervoltage radiations. Each of the remaining nineteen chapters is devoted to a discussion of malignancies of an anatomic structure, organ or body system. A discussion of the response of normal tissue to radiation inaugurates each chapter and is followed by a discussion of the technics of administration and dosage of radiation. Results of therapy, the prognosis and a summary are included. Various methods of using radium in treating carcinoma of the cervix and uterus are described. There are 146 illustrations. Included in 56 tables are several comparing results of various therapists, as well as results from surgery alone. A list of numerous chosen references concludes each chapter.

Although this text is directed principally to the radiotherapist, other specialties will find it valuable in evaluating the indications and contraindications of therapy of various malignancies.

H. F. D.

A Traveler's Guide to Good Health, by Colter Rule, M.D. Doubleday & Company, Inc., Garden City, New York, 1960. Price: $3.95.

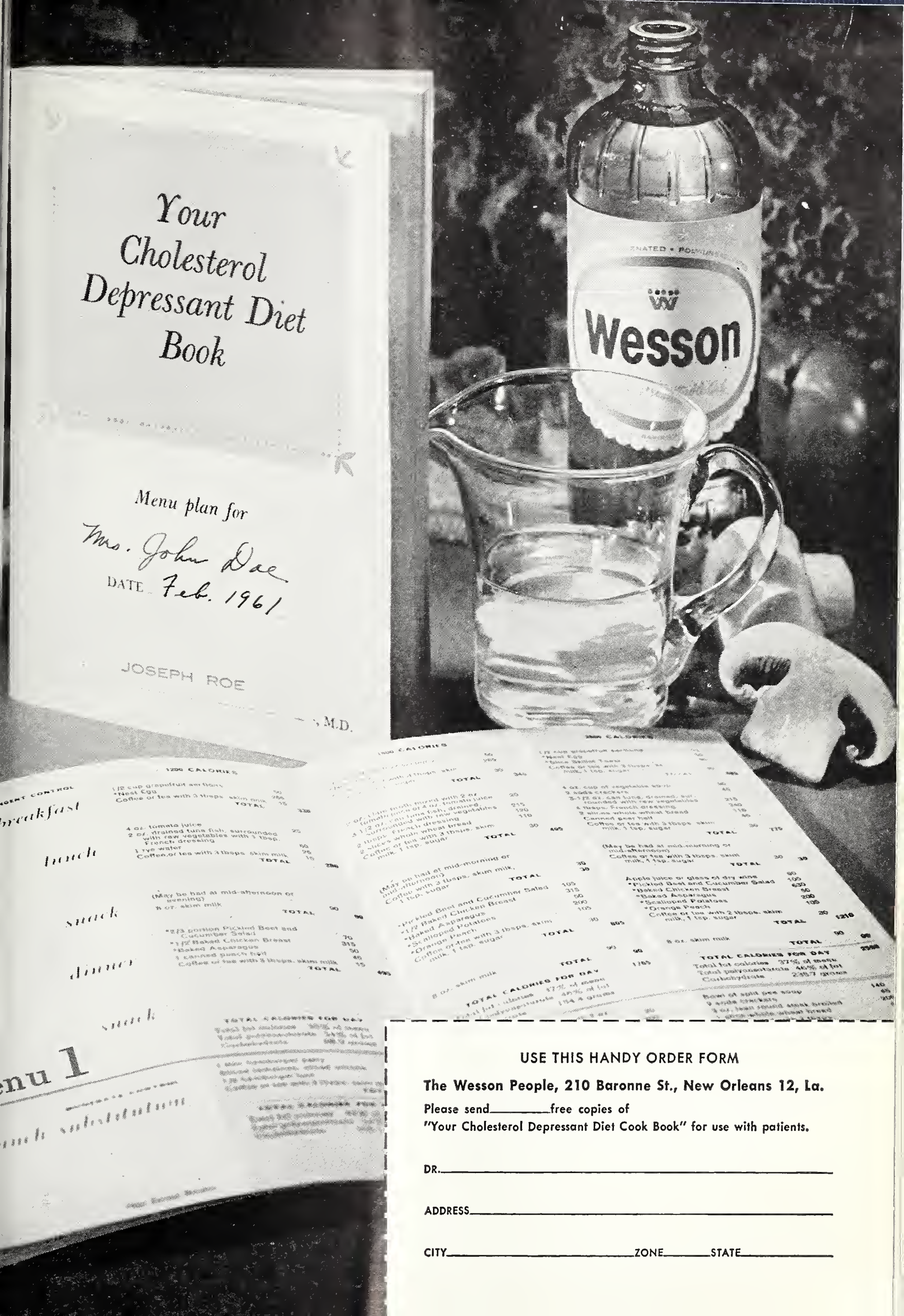
This well written and informative book gives the prospective traveler as comprehensive medical advice as possible for the average person preparing for a trip abroad. This book should be recommended by the doctor in answer to queries from his patients who are contemplating traveling or sojourning in a foreign land. There is excellent information as to medical facilities and health situations peculiar to the different geographic and climatic parts of the world as well as adequate immunization advice. There is a table of medical terms in French, German, Italian and Spanish which would be very helpful to the traveler in distress.

T. S. H.

Epidemic!, by Frank G. Slaughter. Doubleday & Company, Inc., Garden City, New York, 1961. Price: $3.95.

"Epidemic!"—a novel by our inimitable colleague Frank Slaughter, should stand well up on the list of things to be read. The story deals with a disease about which most of us know little, other than the knowledge attained from historical works, for it deals with an overwhelming invasion of New York City, in 1965, with the rat-borne, flea vectored, Pasteuella pestis—or the Black Plague. In his usually medically correct and interesting style the author unfolds a story, rich in suspense, by interweaving an accidental invasion of the plague bacillus into a New York harbor made suitable for such an invasion by a strike which allowed garbage accumulation, with a simultaneous effort on the part of subversive ele-

(Continued on page 892)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ments to tie up the city through a series of acts of violence; again, an accidental, but fortuitous set of circumstances, for the subversive elements concerned.

Altogether, a gripping novel in the much to be praised style of one of our better contemporary novelists as he tells the story of various men, in many walks of life, in their struggle to save the city's inhabitants from the combined threats culminating in a potential major disaster. R. H. S.

Patient Care and Special Procedures in X-Ray Technology, by Carol Hocking Vennes, R.N., B.S., Formerly Surgical Supervisor and Clinical Instructor, University of Minnesota Hospitals, Minneapolis, Minn.; and John C. Watson, R.T., Director of Courses in X-Ray Technology, University of Minnesota Hospitals, Minneapolis, Minn. Illustrated. The C. V. Mosby Company, St. Louis. 1959.

Although some aspects of this volume are overly idealistic, this is a good text for beginning students.

The reasons for various examinations and general procedures to be followed, are explained briefly in a manner which should be easily grasped by the neophyte. As well, valuable suggestions are made throughout the volume, which if followed would greatly enhance the patient's comfort and allay his apprehension. The authors emphasize methods of establishing proper rapport with the patient in order to facilitate more satisfactory radiographic procedures. R. H. S.

Synopsis of Ear, Nose, and Throat Diseases, by Robert E. Ryan, B.S., M.D., M.S. (ALR), F.A.C.S.; William C. Thornell, A.B., B.M., M.D., M.S. (ALR), F.A.C.S.; and Han von Leden, M.D., F.A.C.S., F.I.C.S. The C. V. Mosby Company, St. Louis, 1959. Price $6.75

The Synopsis of Ear, Nose and Throat Diseases by Ryan, Thornell and Von Faden should be read by every practitioner of medicine. It tells of the diseases of ear, nose and throat concisely, yet enough to enable the doctor to do the ordinary things that need to be done.

It is an excellent summary and should be recommended. C. H. B.

BOOKS RECEIVED

The Management of Fractures and Soft Tissue Injuries, by The Committee on Trauma, American College of Surgeons. W. B. Saunders Company, Philadelphia and London, 1960. Price: $5.00.

The Role of the Physician in Environmental Pediatrics, by Carl C. Fischer, M.D., Professor and Head of the Department of Pediatrics, Hahnemann Medical College and Hospital; Director of the Health Service, Girard College, Philadelphia. Landsberger Medical Books, Inc., New York, 1960. Price: $5.50.

Outline of Pathology, by John H. Manhold, Jr., D.M.D., Professor, and Director of Oral Diagnosis and Pathology for the College of Dentistry, Seton Hall College of Medicine and Dentistry; Attending Pathologist, Jersey City Medical Center; Theodore E. Bolden, D.D.S., M.S., Ph.D., Assistant Professor of Oral Diagnosis and Pathology, College of Dentistry, Seton Hall College of Medicine and Dentistry; Attending Pathologist, Jersey City Medical Center. W. B. Saunders Company, Philadelphia and London, 1960. Price: $4.75.

Ciba Foundation Symposium on Haemopoiesis, Cell Production and Its Regulation, edited by G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P. and Maeve O'Connor, B.A. Little, Brown and Company, Boston, 1960. Price: $11.00.

Atlas of Obstetric Technic, by J. Robert Willson, M.D., M.S., Professor of Obstetrics and Gynecology, Temple University School of Medicine, Philadelphia, Pa.; Head of the Department of Obstetrics and Gynecology, Temple University Hospital, Philadelphia, Pa. The C. V. Mosby Company, St. Louis, 1961. Price: $14.50.

Cardiovascular Dynamics, by Robert F. Rushmer, M.D., Professor of Physiology and Biophysics, University of Washington Medical School. W. B. Saunders Company, Philadelphia and London, 1961, Second Edition. Price: $12.50.

Curiosa et Trivia

WILLIAM B. McCUNNIFF

Included in the forty-odd types of special license plates issued in New York State are about twenty-four thousand issued to M.D.'s. Other doctors (divinity, osteopathy, optometry, podiatry, etc.) have their own special plates.

They do get broken hearts! Significantly more women than men have cardiac rupture after myocardial infarction.

Fifteen years after Hiroshima and Nagasaki, 230,000 persons are still suffering from radioactive diseases; over four thousand patients are still hospitalized.

Capsule Clinics

- The diuretic response to trichlormethiazide (Naqua, Metahydrin) was neither as consistent nor as rapid as that obtained with mercurial diuretics. Mintz, D. O., and Rosenberg, I. N., J. New Drugs 1:85, 1961.

- The prematurity rate among mothers who smoke was 18.4 per cent compared to 11.2 per cent for nonsmokers. The rate of premature birth increased with the amount smoked. Frazier, T. M., et al., Am. J. Obst. & Gynec. 81:988, 1961.

- Eighteen very obese men were carefully matched with 18 men of normal weight and given a battery of psychological tests. No differentiating personality features were found. Weinberg, N., et al., Am. J. Psychiat. 117:1035, 1961.

- Methoxsalen seems to be effective in increasing skin tolerance to sunlight by albinos, although it does not result in tanning. Hu, F., et al., Arch. Dermatol. 83:61, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

King-Anderson Bill Hearings Close

The House Ways and Means Committee wound up its hearings on H. R. 4222 after nine days of testimony on August 4. The Washington Report on the Medical Sciences says "Hundreds of thousands of words laden with charges, counter charges, dire prophecies, character depreciation and, occasionally, just plain statistics (were presented). . . . The public hearings ended but with no sign that any committeemen's minds were changed by the testimony or that Ways and Means will hasten to report out H. R. 4222 or any other comparable bill before adjournment."

The AMA's objections to the proposal were spelled out in a detailed, 91 page printed statement which was presented to the Committee by Dr. Leonard W. Larson, President of the AMA. The Missouri State Medical Association filed an 11 page opposition to the bill.

Many medical groups appeared against the bill as well as the Health Insurance Association of America and the Georgia Nurses Association, whose stand was in opposition to the national nurses' association.

Among physicians who appeared against the bill were three of the six physician members of the House, Dr. Durward G. Hall, Springfield, Mo., Dr. Dale Alford, Arkansas, and Dr. Edwin R. Durno, Oregon.

The Council on Legislative Activities of the AMA in its "Legislative Roundup" says that it is unlikely that there will be any vote on the proposal this year and that the fact that the Administration was forced to postpone action because it does not have the votes to get the bill out of Committee can be viewed as a "Round 1 victory" for American medicine. It points out, however, that the fight is still not over and that the proponents of H. R. 4222 will seek to bring election year pressure upon Congressmen in 1962 to get them to back the measure. The report warns that "The upcoming battle will not only be bruising, but there also may be more behind-the-scenes maneuvering. The medical profession and its allies will again have to make an alert, all-out effort if they expect to win."

AMA Testimony

Dr. Larson and Dr. Edward R. Annis represented the AMA in the presentation of testimony. Dr. Larson stressed the "success story" of the Kerr-Mills Medical Aid for the Aged Law. He pointed out that the Kerr-Mills law was operating in 12 states and that 15 other states had passed enabling legislation. "We favor helping those of the aged who need help," he explained. "We believe that the Kerr-Mills Law provides a workable method whereby medical benefits can be made available to those who need them." He said that the Kerr-Mills record was surprisingly good in the face of "a campaign of active disparagement to hamper implementation."

Dr. Annis pointed out that although the opening sections of the bill disclaim federal control over the practice of medicine or the administration of hospitals, specific provisions in H. R. 4222 "provide the means by which federal officials can regiment and control all providers of the services covered." He declared that the proposal would be staggeringly expensive and that the HEW cost estimates are "based on limited experience, chronic optimism and an unwillingness to admit that the program would be severely overutilized." Other points made by Dr. Annis were that H. R. 4222 would endanger the entire Social Security System, undermine private health insurance, discourage voluntary health agencies, cover millions who neither need nor want help, destroy the concepts of individual and family responsibility, and eliminate the state's historical responsibility in the health care field.

Comments, Questions, Answers

AMA representatives were before the Committee for three and a half hours, 50 minutes of which was taken up by the oral statements. Following Dr. Larson and Dr. Annis, Rep. Cecil King read a statement declaring that AMA's presentation "shows how far desperate men will go to further their own purposes." He asked barbed questions about alleged actions taken against AMA members who opposed AMA's political views, limitation in some private health insurance plans for the aged, and provisions in the Kerr-Mills Law. He later implied that his questions were prompted by the fact that he was acting more for the Administration than for himself. Rep. John Byrnes noted that some questions being asked made it appear that the AMA was on trial. Rep. Thomas Curtis declared that Representative King's charges were "unfounded" and asked him to back them up. Rep. Bruce Alger said that Representative King had not read the AMA statement thoroughly and that "what we're fighting here is ignorance."

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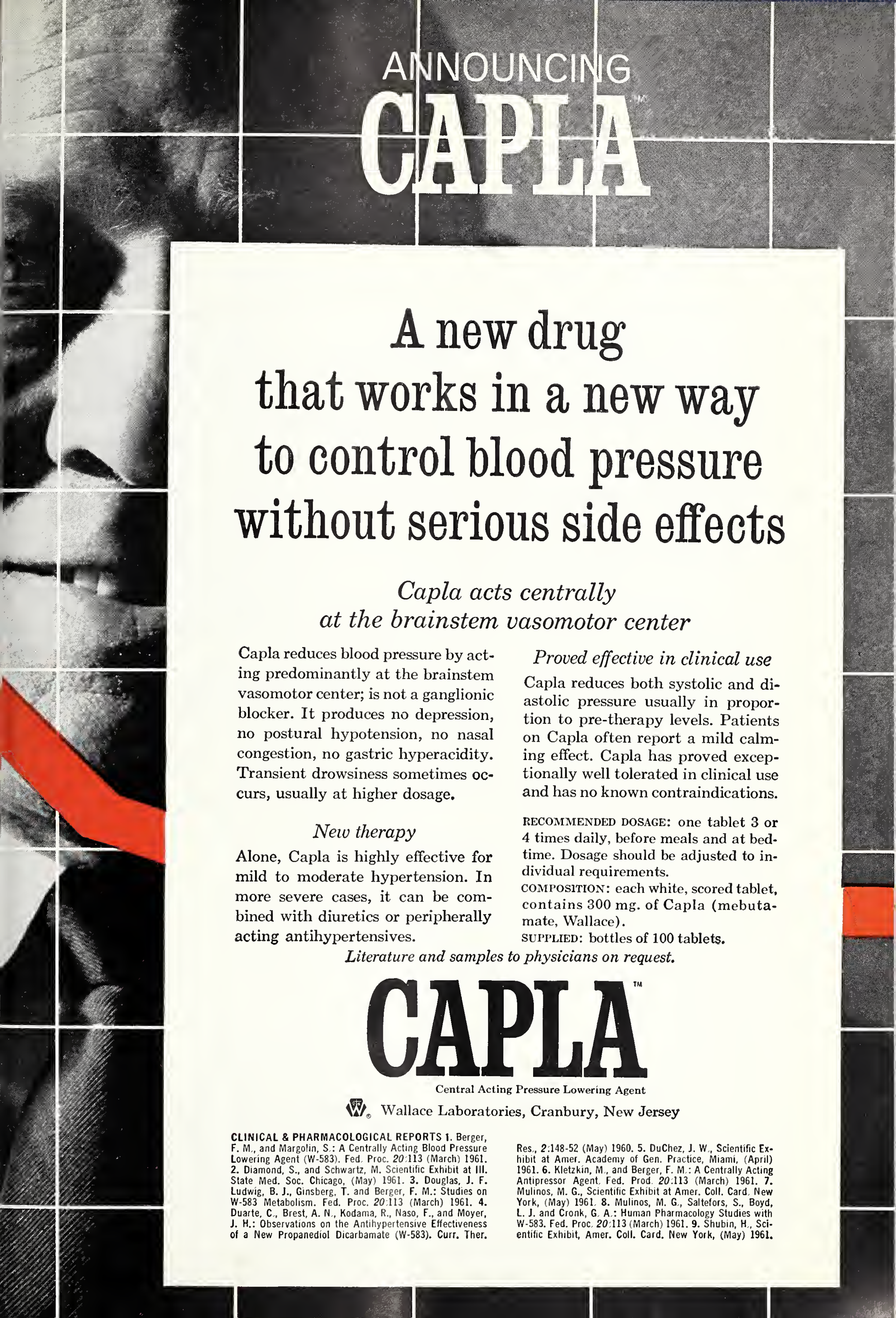

ANNOUNCING

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Capla acts centrally at the brainstem vasomotor center

Capla reduces blood pressure by acting predominantly at the brainstem vasomotor center; is not a ganglionic blocker. It produces no depression, no postural hypotension, no nasal congestion, no gastric hyperacidity. Transient drowsiness sometimes occurs, usually at higher dosage.

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COMPOSITION: each white, scored tablet, contains 300 mg. of Capla (mebutamate, Wallace).

SUPPLIED: bottles of 100 tablets.

Literature and samples to physicians on request.

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CLINICAL & PHARMACOLOGICAL REPORTS **1.** Berger, F. M., and Margolin, S.: A Centrally Acting Blood Pressure Lowering Agent (W-583). Fed. Proc. *20*:113 (March) 1961. **2.** Diamond, S., and Schwartz, M. Scientific Exhibit at Ill. State Med. Soc. Chicago, (May) 1961. **3.** Douglas, J. F. Ludwig, B. J., Ginsberg, T. and Berger, F. M.: Studies on W-583 Metabolism. Fed. Proc. *20*:113 (March) 1961. **4.** Duarte, C., Brest, A. N., Kodama, R., Naso, F., and Moyer, J. H.: Observations on the Antihypertensive Effectiveness of a New Propanediol Dicarbamate (W-583). Curr. Ther. Res., *2*:148-52 (May) 1960. **5.** DuChez, J. W., Scientific Exhibit at Amer. Academy of Gen. Practice, Miami, (April) 1961. **6.** Kletzkin, M., and Berger, F. M.: A Centrally Acting Antipressor Agent. Fed. Prod. *20*:113 (March) 1961. **7.** Mulinos, M. G., Scientific Exhibit at Amer. Coll. Card. New York, (May) 1961. **8.** Mulinos, M. G., Saltefors, S., Boyd, L. J. and Cronk, G. A.: Human Pharmacology Studies with W-583. Fed. Proc. *20*:113 (March) 1961. **9.** Shubin, H., Scientific Exhibit, Amer. Coll. Card. New York, (May) 1961.

Across
Missouri

NEW CONGRESSIONAL DISTRICTS

Based on the 1960 census figures, Missouri lost one congressman, thus necessitating a realignment of congressional districts. The Missouri legislature passed legislation to reduce the number of districts from 11 to 10. The newly designated districts are:

First District: The townships in St. Louis County of Florissant, St. Ferdinand, Normandy and Washington, and the following wards in St. Louis City, 1, 2, 3, 4, 5, 19, 20, 21, 22, 27.

Second District: The townships in St. Louis County of Airport, Midland, Creve Coeur, Clayton, Hadley, Jefferson, Lincoln, Gravois, Bonhomme, Meramec, Concord and Lemay.

Third District: The following wards in St. Louis City, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 23, 24, 25, 26, 28.

Fourth District: The following wards in Kansas City, 15, 17, 23 and the part of Ward 24 lying east of U. S. Highway 71, and all of Jackson County outside the corporate limits of Kansas City except that portion lying between the south line of Jackson County and the south city limits, and west of U. S. Highway 71, and the counties of Cass, Bates, Vernon, Lafayette, Johnson, Henry and Pettis.

Fifth District: The following wards in Kansas City, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 22 and that part of Ward 24 lying west of U. S. Highway 71 and all that part of Jackson County lying between the south line of Jackson County and the south city limits, west of U. S. Highway 71.

Sixth District: The counties of Atchison, Holt, Nodaway, Andrew, Buchanan, Platte, Worth, Gentry, DeKalb, Clinton, Clay, Harrison, Daviess, Caldwell, Ray, Livingston, Carroll, Chariton and Linn.

Seventh District: The counties of Barton, Jasper, Newton, McDonald, Cedar, Dade, Lawrence, Barry, St. Clair, Benton, Hickory, Polk, Greene, Christian, Stone, Taney, Dallas, Webster, Wright, Douglas and Ozark.

Eighth District: The counties of Cooper, Morgan, Moniteau, Miller, Camden, Saline, Howard, Boone, Cole, Maries, Pulaski, Phelps, Laclede, Texas, Shannon, Dent, Reynolds, Carter, Iron, Crawford, Washington, Jefferson, Madison and Wayne.

Ninth District: The counties of Mercer, Grundy, Putnam, Sullivan, Schuyler, Scotland, Clark, Adair, Knox, Lewis, Macon, Shelby, Marion, Randolph, Monroe, Ralls, Audrain, Pike, Callaway, Montgomery, Lincoln, Warren, St. Charles, Gasconade, Franklin and Osage.

Tenth District: The counties of St. Francois, Ste. Genevieve, Perry, Cape Girardeau, Bollinger, Stoddard, Scott, Mississippi, New Madrid, Pemiscot, Dunklin, Butler, Ripley, Oregon and Howell.

The greatest difference is in the Eighth District which places two present incumbents in the same district, Richard H. Ichord, Houston, presently from the Eighth District, and Morgan M. Moulder, Camdenton, presently from the Eleventh District. Other incumbents at present are Frank M. Karsten, St. Louis, First District; Thomas B. Curtis, Webster Groves, Second District; Mrs. John B. Sullivan, St. Louis, Third District; William J. Randall, Independence, Fourth District; Richard Bolling, Kansas City, Fifth District; William R. Hull, Jr., Weston, Sixth District; Durward G. Hall, M.D., Springfield, Seventh District; Clarence Cannon, Elsberry, Ninth District; Paul C. Jones, Kennett, Tenth District.

DIVISION OF WELFARE AID

Late in July the Monthly Administrative Analysis prepared for the Division of Welfare by the Bureau of Research and Statistics was released for the month of May.

A review of the aid given by the Division showed that during May a total of 113,364 persons on Old Age Assistance received payments amounting to $6,785,416, or an average payment per person of $59.86. Benefits were distributed to 26,545 families, including 77,744 children for Aid to Dependent Children, amounting to $2,457,342, or an average payment of $92.57 per family, and $26.35 per person. For permanently and totally disabled persons 15,418 recipients re-

(Continued on page 1000)

Acts as well in people as in test tubes

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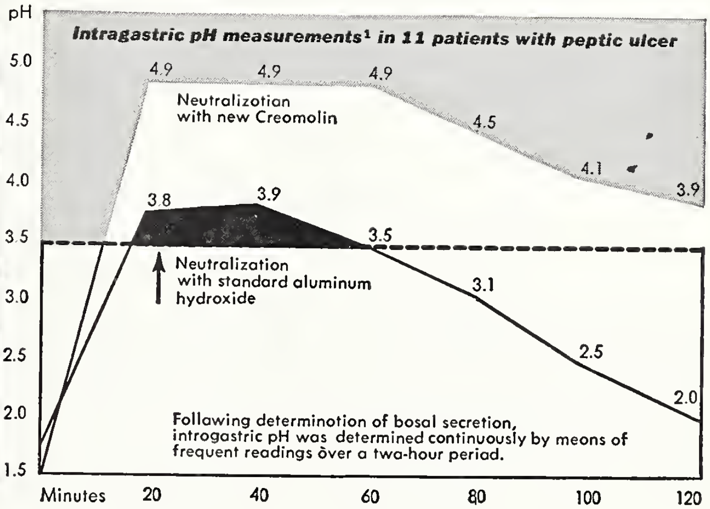

pH
Intragastric pH measurements[1] in 11 patients with peptic ulcer
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
4.9
4.9
4.9
Neutralization with new Creamalin
4.5
4.1
3.9
3.8
3.9
3.5
Neutralization with standard aluminum hydroxide
3.1
2.5
2.0
Following determination of basal secretion, intragastric pH was determined continuously by means of frequent readings over a two-hour period.
Minutes
20
40
60
80
100
120

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References: 1. Schwartz, I. R.: *Current Therap. Res.* 3:29, Feb., 1961. 2. Beekman, S. M.: *J. Am. Pharm. A.* (Scient. Ed.) 49:191, April, 1960. 3. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:381, July, 1959. 4. Data in the files of the Department of Medical Research, Winthrop Laboratories. 5. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:384, July, 1959.

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JOHN F. PEARL, M.D.

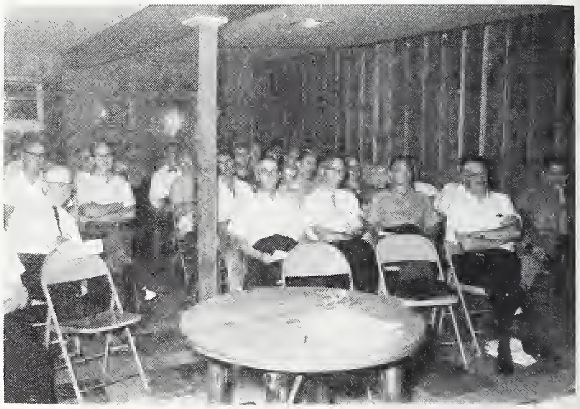
Missouri Academy of General Practice

It was hot, but swimming facilities, air conditioning, and an informal atmosphere helped much to reduce discomfort from the weather at the first one day seminar on "Medical Economics," held by the MAGP, at the Lake of the Ozarks, Sunday, July 30. Some 70 people including doctors, their wives and guests, heard a most interesting and informative program concerning the business side of a doctor's practice, at Arrowhead Lodge, overlooking a beautiful section of the Lake of the Ozarks, a short distance south of Bagnell Dam.

Many of the doctors brought their families and spent the weekend on the lake, while taking off Sunday, July 30, to attend the Academy's program which had been planned and arranged by the Education Committee of which Dr. Doyle McCraw, Bolivar, is Chairman.

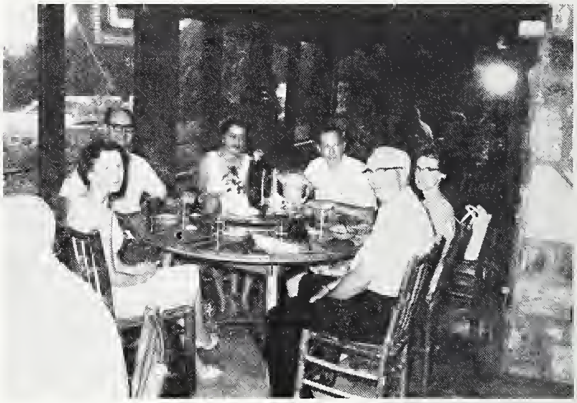
Among MAGP officers present were Drs. Leitch, Pearse, Hall, Knabb, Allen and McCraw.

The program, briefed as follows, received commendation of all of those in attendance. Mr. John Modrall, Executive Director of Public Relations, Eli Lilly and Company, discussed "Some Social, Economic and Political Aspects of a Pharmaceutical Company's Operations and How It Affects Doctors"; Mr. Frank Wooley, Field Representative of the AMA put the cards on the table as to "What's Going On in Washington"; Mr. Robert Koch, Assistant Administrator, AAGP Group Disability Plans, gave a most informative and up-to-date discussion on these plans; Mr. James McBride, Vice President, Barrett, Fitch, North and Company, presented numerous suggestions on "Investments for the Doctor"; Mr. William Boulware, Boulware and Associates, Estate and Analysis and Planning, presented a well organized talk on "Life Insurance and Estate Planning for the Doctor"; Mr. Floyd Wehrenberg, Professional Management, Midwest, spoke to the group on "The Business Side of a Doctor's Practice" and answered numerous questions following his presentation.



The audience appreciated the program.

On Saturday night, preceding the Sunday meeting, an informal "bull session" was held at the lodge and of course various subjects were aired at that time by those who took advantage of the opportunity.



Mrs. McCraw, Dr. and Mrs. Farthing, Mr. and Mrs. Boulware and Dr. McCraw had lunch at the Lodge.

The attendance was greater than anticipated at this first "Medical Economics Session," so

(Continued on page 962)

who coughed?

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H. M. HARDWICKE, M.D., ***Jefferson City***

Division of Health

Public Health Laboratories and the Private Physician

In 1959, the Division of Health requested private physicians, where possible, to make arrangements with private laboratories for the performance of the routine procedures needed in their practices. This request was made because it was felt that the practice of laboratory medicine was basically the practice of medicine and, further, that it was the responsibility of government agencies to foster, where possible, the utilization of private laboratories under the free enterprise system.

The communication originally sent out led to misunderstanding. Many physicians understood that the Division of Health was discontinuing serologic tests for syphilis, other than prenatal and premarital tests as required by law, and that it was necessary to make arrangements with a private laboratory if they wished diagnostic serologies performed.

It has been learned that some physicians have actually ceased taking specimens for syphilis serology because they could not make arrangements for this work with private laboratories. This is unfortunate in that it is detrimental to the public health of the population and might result in harm to both the patient and physician.

Recognizing the public health aspects of this problem, a letter on this subject was sent to the presidents of the Missouri State Medical Association and the Missouri State Osteopathic Association on January 17, 1961, for dissemination to their members. This letter pointed out that the Division of Health has not ceased performing serologic tests for syphilis and that we will continue to perform these tests for physicians.

The Division of Health encourages and hopes, however, that where it is possible for physicians to make arrangements with private laboratories, they will have their work done there. It is our belief that the Division of Health laboratories should provide maximum support for conditions of major public health significance with minimum support for private work of a routine nature.

The pathologists of the State of Missouri have agreed that their laboratories will supply blood mailing containers to any physician requesting them, free of charge, and that if the attending physician certifies the patient to be indigent that they will perform the serologic test without charge. The pathologists have further agreed to bill the patient directly for the service rendered, if the physician so desires.

It is suggested, therefore, that until a physician can make satisfactory arrangements with a private laboratory to perform his syphilis serologies that they be sent to the Division of Health. Our laboratories will, as they have in the past, endeavor to provide prompt and accurate service.

Pathologists who have expressed willingness to do work for indigent patients at no charge follow:

Allen, Hollis N., M.D., Allen Medical Laboratories, 634 N. Grand Blvd., St. Louis 3.

Allen, Henry C., M.D., Allen Medical Laboratories, 35 N. Central Ave., Clayton 5.

Allen, James H., M.D., Allen Medical Laboratories, 35 N. Central Ave., Clayton 5.

Bauer, John D., M.D., DePaul Hospital, 2415 N. Kingshighway Blvd., St. Louis 13.

Blache, J. Owen, M.D., Peoples Hospital, 2221 Locust St., St. Louis 3.

Bridgens, James G., M.D., Laboratory, Independence Sanitarium & Hospital, Independence, Missouri, and Englewood Medical Laboratory, 10901 Winner Road, Independence.

Buhler, Victor B., M.D., Buhler Laboratory, 330 West 47th St., Kansas City 12, and St. Joseph's Hospital, Kansas City 6.

Campos, F. J., M.D., Clinical Laboratories, 16 Hampton Village Plaza, St. Louis 9.

Cohen, Hilliard, M.D., The Menorah Medical Center, 4949 Rockhill Road, Kansas City 10.

Coller, Frederick C., M.D., St. John's Hospital, Springfield.

Cooper, Thomas J., M.D., Clinical Laboratories, 100 N. Euclid Ave., St. Louis 8.

Drake, William L., Jr., M.D., Allen Medical Laboratories, 634 N. Grand Blvd., St. Louis 3.

Ferguson, R. L., M.D., St. John's Hospital, Joplin.

Gibson, David M., M.D., St. Luke's Hospital, Kansas City 11.

Gorelick, David F., M.D., Springfield Medical Laboratory, 305 Professional Bldg., Springfield.

Hagebusch, O. E., M.D., Clinical Laboratories, 950 Francis Place, Clayton 5.

Hanan, Ernest B., M.D., Burge Hospital, 1423 N. Jefferson Ave., Springfield.

Haynes, James W., M.D., Allen Medical Laboratories, 325 N. Kirkwood Road, Kirkwood.

(Continued on page 964)

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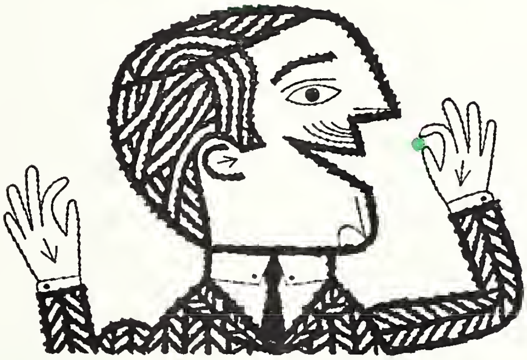

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Reference: 1. Scal, J. C.: Eye Ear Nose & Throat Month. 38:738 (Sept.) 1959.

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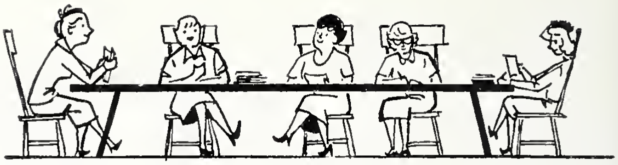

The Auxiliary annual fall Executive Board Meeting and Membership Conference will be held September 27 and 28 at Arrowhead Lodge, Lake of the Ozarks, Missouri. The Sixth District and the Miller-Morgan-Moniteau auxiliaries, with Mrs. Jordan Kelling, as chairman, will serve as our hostesses.

Mrs. Frederick E. Wade

The program will be presented by various state chairmen and is designed to furnish the county auxiliaries with the latest information on all Auxiliary projects. Mrs. Henry S. Bauman and Mrs. Stanley Peterson, both past state presidents, and Mrs. J. Martyn Schattyn, president-elect, will serve as moderators for the panel discussions.

The Conference location was chosen so our busy doctor husbands might come along and enjoy a vacation of fishing or loafing, while we work on the Auxiliary program. It is a beautiful time of year in the Ozarks, and we prescribe the trip as a perfect tonic to get you ready for the year ahead. We are going to have fun, as well as work, and plans for the Wednesday night entertainment include a home talent show featuring Mountain Music and audience participation. A swim in the heated pool at the Lodge comes under our physical fitness program.

Our Auxiliary was honored to be invited as a guest at the meeting of the Committee on Mental Health for the Missouri State Medical Association. Dr. James N. Haddock, Committee Chairman, and his Committee members are performing a great service not only to the medical profession, but to all the people of Missouri, for their work and leadership in the field of mental health.

Our Auxiliary objective is to further the aims of the Medical Association. Their objective is to help preserve and protect the health and welfare of all Americans. It is charged the medical profession has a selfish interest in its fight for freedom, and if these objectives and accomplished goals are selfish, then freedom itself becomes selfish.

The greatest aid our Auxiliary can give the medical profession is in the field of public relations and giving to others a true insight into the problems which confront, not the medical profession, but those they desire to serve. Some trades may look to their leadership to gain the 30 hour work week and a guaranteed annual income, with strike threats as the bargaining lever. The medical profession looks to its leadership for advancement of medical science and continuing education through scientific publications and meetings.

The Auxiliary has much to offer every doctor's wife. Many of our members are active in other groups, and much of our Auxiliary program material can be of great value to you in other organizations. Legislation study groups, Parent-Teacher associations, women's civic clubs, and our health and welfare agencies, are using films and leaflets and program material prepared for use of Auxiliary members. If you need assistance in planning a program for another club or group, call on our program chairmen for assistance. Auxiliary programs, like Auxiliary aims, encompass the interest of all Americans.

Make your reservations now, and join with us at Arrowhead Lodge, Lake of the Ozarks, for Fall Conference program and fun. The year ahead will have many challenges, and through our Auxiliary work we can find many of the answers. We will be looking for you on September 27 and 28. See you then.

Volume 58, Number 9—September, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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HOWARD B. BURCHELL, M.D., ***Rochester, Minn.***

Mitral Incompetence

Mitral incompetence has long been of great interest to cardiologists and the technic of cardiac catheterization and the intracardiac explorations by the surgeon have given new and more definite knowledge about the function of the diseased mitral valve and correlations established with clinical findings. The present possibility of clinically predicting the type of mitral insufficiency with reasonable certainty is discussed. The promising results of mitral protheses in the laboratory and their utilization in patients are discussed.

Dr. Burchell is Consultant in Medicine and Cardiology at the Mayo Clinic, and Professor of Medicine, Mayo Foundation, University of Minnesota.

The paper was presented at the 103rd Annual Session of the Missouri State Medical Association, Kansas City, March 19 to 22, 1961.

IN INTRODUCTION to the subject of mitral incompetence, one first must address oneself to the problem of evaluating the significance of the apical systolic murmur. Discussion of the apical systolic murmur as the only abnormality on cardiac examination still generates heat more often than enlightenment. In general, one should have some evidence of left ventricular enlargement before the diagnosis is considered certain. The difficulties in assessing apical systolic murmurs are three:

1. There is inadequacy of accurate descriptions or phonocardiograms of cases, or both. In this regard, records in recent years may be woefully lacking as compared with those of the past masters of the art of auscultation or, I hope, with those obtained nowadays. With prominence of such technical advances as those represented by roentgenograms and electrocardiograms we, as a profession, had allowed our auscultatory skills to wither. (It is regrettable that a review of problems written by a past master in the profession such as Broadbent[1] is not more readily available in libraries.) For instance, physicians might have stressed the intensity of the murmur but not its duration, its intensity pattern, its relationship to the first sound and its frequency and quality. For accuracy of records, it is most useful to chart the auscultatory findings.

2. There is still an inadequate number of patients observed for many years. However, even though persons with apical systolic murmurs in an inclusive sense are accepted by insurance companies, there have been rumblings of a disappointing business experience. In the clinic with which I am associated, occasional patients seen 20 or more years ago with murmurs labeled innocent are now returning with murmurs of organic heart disease. The opposite, of course, also is true.

3. The special methods of exact investigation are still somewhat cumbersome and discomforting, but real progress is expected. Transaortic ventriculography and simultaneous left atrial and left ventricular catheterization are becoming

commonplace procedures in good laboratories. With the former method, mitral regurgitant streams may be recognizable in the angiocardiogram, and with the latter method, injection of dye into the left ventricle with left atrial sampling will reveal the regurgitated labeled blood.

The topic "mitral incompetence" is a traditional one for argument, and the term must be first defended. One properly speaks of "mitral regurgitation" in the beating heart, as pointed out by McKusick,[2] but when one examines or demonstrates the dead heart in the pathology laboratory, a different term is preferred to indicate that the valvular structure was inadequate. In the dead organ one cannot see regurgitating valves. If, by definition, a valve is a structure that allows unidirectional flow, one could defend also the term "mitral insufficiency" on the assumption that the total term is always "mitral valvular insufficiency."

The recent increased interest in mitral incompetence is related to the following factors. (1) For many years mitral incompetence has represented a hiatus in cardiologic knowledge; it was the concept of Sir James MacKenzie[3] that mitral incompetence never was a significant basic problem. His concept of myocardial failure remains axiomatic, but there was no explicit admission in his writings that this could result from gross mitral incompetence. (2) The traditional concept of the accuracy of various physical signs in the diagnosis of pure mitral stenosis has been shaken. (3) Mitral incompetence is one of the important factors in surgical failure in mitral stenosis. (4) Mitral incompetence is a real challenge to any surgical research team, both from the viewpoint of reconstruction of the deformed valve and from the viewpoint of replacement by a prosthesis.

The mitral valve consists of a sleeve of tissue with a scalloped free margin. It is usually perceived as a bicuspid structure with a short posterior cusp and a longer miter-shaped anterior cusp. The latter is readily seen to be the dominant structure in the function of the valve.

James Hope[4] attributed to a Professor Mayo[5] the first accurate account of how the mitral valve functions, and Mayo's simple line diagram (fig. 1) showing the two leaflets in systole and diastole is a basically correct one.

Classification

Incompetence of the mitral valves may be classified from the pathologist's viewpoint according to the traditional categories of congenital and acquired.

Congenital causes are (1) defects of the atrioventricular canal (ostium primum type of atrial septal defect); (2) mitral cleft without septal defect; (3) fibroelastosis (endocardial sclerosis); (4) left ventricular dilatation—ventricular septal defect, anomalous coronary artery from pulmonary artery; (5) accessory orifice; (6) tricuspid type of valve, with corrected transposition of the great vessels; and (7) tricuspid incompetence with "complete transposition" of the great vessels.

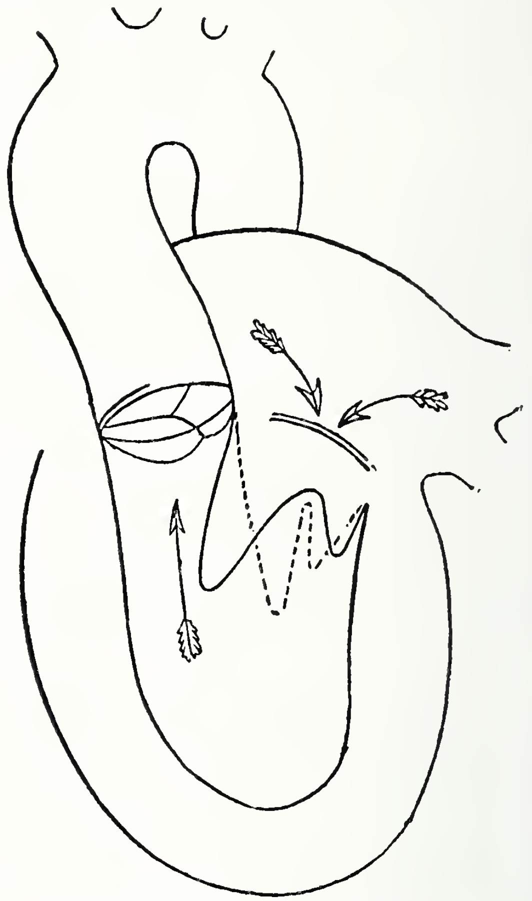

Fig. 1. Mayo's diagram of mitral-valve function.

In an occasional person having a defect belonging in the general category of atrioventricular-cushion malformations, mitral insufficiency is by far the most prominent lesion, with the septal defects being small and rather insignificant. In rare instances, a mitral cleft without any septal defect may be present.

It is questionable whether fibroelastosis can be properly listed as a cause of congenital mitral insufficiency, but I believe it should be mentioned. The same question pertains to accessory orifices in the mitral valve, because in the majority of instances these are incidental findings without evidence that the valve was incompetent.

In persons with the syndrome called "corrected transposition," in which the aorta is anterior but connected to the left ventricle, the left atrioventricular valve is of the tricuspid type and has no continuity with the aortic leaflets. This left atrioventricular valve may show an associated Ebstein malformation (on the left side) and may be grossly incompetent. Thus in a young person with gross "mitral insufficiency" without the history of rheumatic fever, such a diagnosis should be considered.[6, 7] The diagnosis will be supported in the presence of second or third degree heart block and may be established by either venous or selective angiocardiography.

The acquired causes of incompetent mitral valves may be listed as (1) rheumatic endocarditis, with active carditis or without rheumatic activity; (2) subacute bacterial endocarditis, active or healed; (3) spontaneous or traumatic rupture of chordae; (4) myocardial infarction, active (loss of chordal insertion) or healed (fibrosis of papillary muscle); (5) left atrial tumor; and (6) surgical procedures.

The healed phase of subacute bacterial endocarditis, either with a history of an illness having been diagnosed with the proper supporting data, or without a history of bacteremia, is of increasing clinical frequency; according to evidence given by Hepper and colleagues[8] lack of a history of bacteremia suggests that in certain mild cases subacute bacterial endocarditis has been treated and cured without having been recognized. Acute mitral insufficiency due to infarction of the papillary muscle is rare, but not uncommonly mild degrees of mitral insufficiency may be related to healed infarction of the papillary muscles, particularly the posterior one, with fixation of the chordae tendineae to the medial commissural area of the posterior leaflet.

That left atrial tumor may simulate mitral stenosis has often been emphasized, but this lesion may also mimic a mitral lesion in which mitral incompetence is of significance. In particular, high or regurgitant V waves have been noted in the left atrial or wedge-pressure records of two patients with left atrial tumor.[9]

An increasing cause of mitral incompetence in patients coming to a cardiac clinic at this time is previous valvotomy for mitral stenosis. This may develop even though no mitral insufficiency was present before the operation.

EARLY OBSERVATIONS

The first clear illustration of a heart with mitral-valve disease is credited to Vieussens,[10] and the lesion has generally been labeled "mitral stenosis." Certainly there was mitral stenosis, but it seems possible that the valve was also incompetent. The engraving showing the valve from below illustrates more clearly the pathologic derangement than does the more frequently used traditional view from above. It was a hundred years after Vieussens that Hope[4] became interested in cardiac murmurs, and he claimed to be the first to have diagnosed mitral regurgitation (not only in man but also in a prize horse). The claim seems a valid one, and the correctness of his view that the apical systolic murmur is produced by mitral regurgitation seems established (as is the error of his opinion regarding the significance of the diastolic murmur of mitral stenosis). Christian Anderson is the first man ever to have had the clinical diagnosis of mitral regurgitation made, but the actual diagnosis given in the text is "much disease of the valves." In Hope's book there are a number of illustrations of valvular deformities, and one drawing of an inadequate posterior leaflet with thickened chordae is a good one. The view is unusual in that the artist apparently saw the posterior leaflet as it would be exposed by splitting the anterior (or aortic) leaflet; there is even a suggestion of a regurgitant lesion on the posterior atrial wall.

PATHOLOGY AND ETIOLOGY

The pathologic pictures of mitral incompetence consequent to rheumatic endocarditis may be separated into two categories: (1) those associated with stenosis and (2) those without stenosis or pure incompetence. In stenosis, there may be a fibrous collar like a washer, or calcified or frozen leaflets. The causes of pure incompetence are related to such features as shortening of either the posterior or the anterior leaflet, dilatation of the annulus (a phenomenon in which I believe and which is supported by our surgical colleagues), and lengthening or angular displacement of the chordae, or both, allowing the valve to evert into the atrium.

Over the last 10 years I have studied the records of approximately 50 cases of gross mitral incompetence without mitral stenosis and without associated aortic valvular disease. The causes are listed as rheumatic disease in 24 cases, rheumatic disease with gross calcification in only one, ruptured chordae in nine (known subacute bacterial endocarditis in three of the nine), subacute bacterial endocarditis without chordal rupture in one, congenital disease in two, mycotic aneurysm in one, and "phantom aortic stenosis" in two. Of these 40 cases the designation of cause is based on surgical exploration or an examination of pathologic specimens. In the additional

10 cases the clinical and cardiac-catheterization data strongly indicate gross mitral insufficiency without associated valvular defect. In this same period there were 33 patients who had gross mitral incompetence that was definitely associated with moderate stenosis. From personal observations I have not been convinced that the orientation of the orifice per se was a significant determinant of the presence or absence of regurgitation as suggested by Harken and colleagues[11] and supported by Biörck and colleagues.[12]

Edwards and I[13] believe that once mitral insufficiency begins, the consequent left atrial dilatation will shorten the functional part of the posterior leaflet and aggravate the incompetence. Edwards has used the phrase "mitral insufficiency begets mitral insufficiency." The mitral incompetence that sometimes assumes major significance in cases of ventricular septal defect, anomalous coronary artery, or coarctation is best explained in this context; that is, it is consequent to the marked enlargement of the left ventricle.

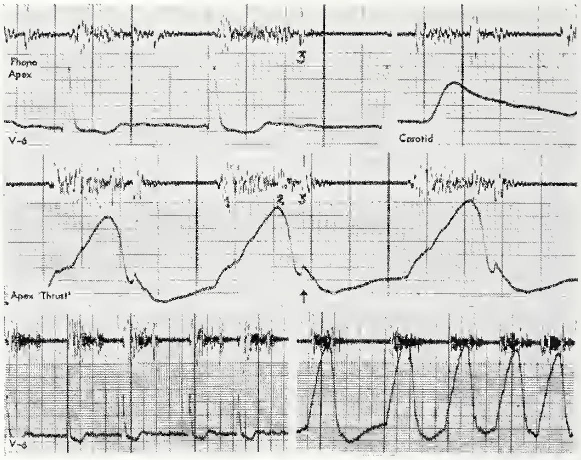

Fig. 2. Phonocardiogram and apical impulse in a woman aged 40 who had mitral incompetence. The apical tracing showing the secondary thrust at the time of the third sound is of particular interest. The mitral valve was repaired under conditions of cardiac bypass. Gross mitral incompetence was present, with a shortened deformed posterior leaflet and rupture of a minor chorda of the anterior leaflet.

Clinical Features

The murmur of mitral regurgitation is characteristically holosystolic or pansystolic, with the first sound often obscured. However, in some instances a loud snapping first sound may be heard, particularly in patients with ruptured chordae tendineae. Although the murmur usually starts with the first sound, in occasional cases there is a perceptible gap between the first sound and the onset of the murmur. In one patient a late systolic murmur was replaced by a typical pansystolic murmur in an eight year period. The murmur varies markedly in its loudness or intensity. One may hear opening snaps occasionally in patients whose lesion is predominantly one of regurgitation, but the differentiation between such a sound and a third sound of altered quality is not always easy. In pure mitral insufficiency a loud early diastolic snapping sound, despite its quality, is usually a third sound and not a true snap. (The latter is presumably related to sudden reversal of the curvature of the anterior mitral leaflet.) If one records an apex cardiogram one may observe chest-wall movements that indicate that ventricular distention is occurring suddenly at that time (fig. 2). With the peak systolic pressures in the left atrium being frequently in the neighborhood of 50 to 70 mm. of mercury, it may be wondered why an opening sound might not appear, very early, very close to the aortic second sound. The reason lies in the absence of a persistent early gradient between the atrium and the ventricle as the ventricle relaxes, and recorded pressure curves parallel one another during the steep part of their slopes. In previous decades it was taught that an apical diastolic thrill and murmur were pathognomonic of mitral stenosis. It is now known that these signs may occur when the predominant hemodynamic fault is mitral regurgitation, with the murmur and thrill related to a tremendous early diastolic flow and with mitral-value narrowing of slight degree. It may readily be appreciated that if the heart rate is relatively slow, the thrill and murmur are decrescendo and disappear by mid-diastole. In some instances an atriogenic or presystolic murmur or sound may be related to a short diastolic period; as an example, it was very apparent in a case of atrial parasystole in which one heard atriogenic murmurs with early artial beats whenever the atrial contraction occurred just at the early phase of rapid ventricular filling. It was also noted that a loud summation sound occurred with certain of the atrial premature beats when these were manifest just at the period where the third sound would occur in the normal cycle.

In occasional instances of valvular heart disease the differentiation between mitral insufficiency and aortic stenosis by auscultation is not easy. A diagnostic trap is laid when a patient with mitral insufficiency presents with a thrill and loud systolic murmur in the midsternal and aortic areas. Other signs of aortic stenosis may be absent but the thrill and murmur may be so prominent that they override proper integration of signs in the clinician's cerebral computer. It was such a case that led to the thesis that the direction of the regurgitant jet and its impact on the atrial wall determined the distribution of murmurs.[14] In a person with ruptured chordae to the posterior cusp, the regurgitant jet as judged by the endocardial lesion on the atrium may be anterior, and if the proper section be made it may be demonstrated that this atrial lesion lies immediately adjacent to the posterior wall of the aorta. For the past five years a correlation has been attempted between the area on the chest where the systolic murmur of mitral regurgitation is distributed and the direction of the regurgitant jet as determined by the surgeon or by the location of the regurgitant atrial endocardial lesion. A fair correlation exists, particularly if selected cases are chosen for charting; specifically in patients with ruptured chordae,[15] one can say with some confidence that when the posterior leaflet is incompetent and acts as a flaillike baffle the murmur will have its greatest intensity anteriorly, and when the anterior leaflet is unsupported the murmur may be expected to have its greatest intensity in the posterior axilla and to be well heard in the left scapular area. Since one of the common defects of rheumatic mitral disease is complete inadequacy of the posterior leaflet, the regurgitant flow in these cases is directed backward and thus the location of the maximal intensity of the murmur in the axilla is in accord with the general theory. In additional support to the concept, in patients with mitral incompetence associated with the ostium primum type of atrial septal defect (or atrioventricular-cushion anomalies) the regurgitant murmur is often heard in the lower sternal area, which suggests that the regurgitant jet from the left ventricle may be passing directly into the right atrium.

In certain instances of mitral insufficiency, pulsus bisferiens may be present. In cases in which this occurs with an everting cusp, one wonders whether the dip in the pulse might be related to the instant the cusp everts into the atrium, transiently lowering the ventricular pressure.

A giant-sized left atrium is not found in persons with ruptured chordae tendineae, but it is characteristic of long-standing mitral valvular disease. In patients who have both mitral stenosis and insufficiency, it is axiomatic that the larger

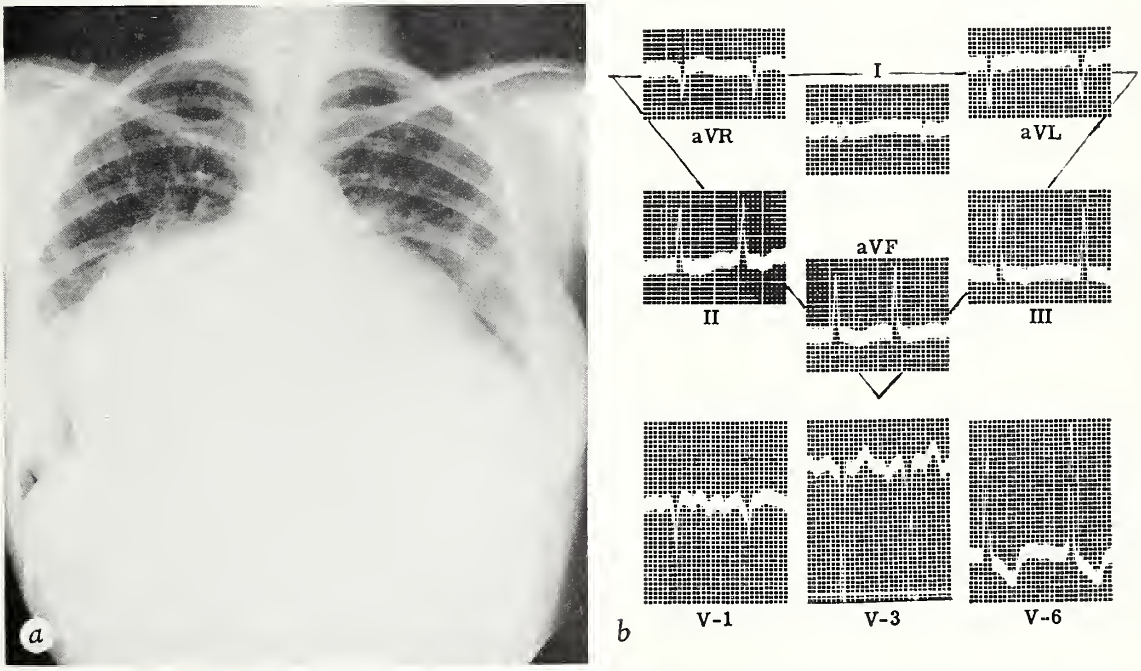

Fig. 3. *a* and *b*. Patient with gross mitral incompetence. The tremendous (aneurysmal) dilatation of the left ventricle is evident. In the electrocardiogram the mild right axis deviation in the presence of evidence of left ventricular hypertrophy is noteworthy. The patient, a woman aged 29, was operated on under conditions of cardiac bypass. She had extensive calcific disease of the mitral valve with gross incompetence. The left atrial pressure at the time of operation was 70/21 mm. of mercury.

the left atrium the more probable it is that the mitral incompetence is a more serious hemodynamic fault than the stenosis (fig. 3a). In a group of patients with combined mitral stenosis and regurgitation, a wide variation in the electrocardiographic aberration may be seen. In the group of patients that my colleagues and I have seen with pure mitral insufficiency and that have had either surgical or postmortem study of the incompetent valve, a certain electrocardiographic picture has been evident (fig. 3b). Atrial fibrillation was practically universal—normal sinus rhythm was present in only 6 per cent. This finding may be only a manifestation of the fact that these patients were studied relatively late in their disease process and were, or had been, in heart failure. Of interest is the low incidence of left axis deviation found in these patients, this being present in only 15 per cent. The mean QRS vector in the frontal plane was usually in the 90-degree sector, but in 40 per cent one could say that right axis deviation was present. This occurred even though there was overt evidence of left ventricular hypertrophy in the left precordial leads with the R wave being in excess of 2 millivolts in more than 75 per cent of cases. In respect to the concept that there is physiologic overloading, when the R wave was more than 2 mv. in V_6 the T wave in this lead was upright in 20 per cent of cases. It seems proper to emphasize the percentage that had an upright T wave rather than the 80 per cent that had an inverted T wave. These individuals, who have a hypertrophied left ventricle, are in failure, are receiving digitalis, and are not the best group to utilize in support of the concept of electrocardiographic aberrations related to physiologic, so-called volume or diastolic, overloading.

A decade ago one of the main clinical problems was the differentiation of pure mitral stenosis from mitral stenosis associated with significant insufficiency. This now creates much less of a dilemma, because of experience and the utilization of multiple approaches. The regurgitant pulse in the left atrium (or as this is registered from the catheter wedged in the pulmonary artery) was, and still is, one of the most important features allowing discrimination between mitral incompetence and stenosis.[16] Various ways of evaluating the magnitude and contour of the V wave have been published, but I have seen no method of separating the predominance of stenosis over incompetence superior to that of comparing the amplitude of the V wave to the mean pressure. When the mean wedge pressure is in excess of 20 mm. of mercury there is good separation of patients with mitral incompetence from those with mitral stenosis. One does not ignore helpful features of the contour of the curve, such as, for instance, an absence of the X wave and a sharp descent from the V crest to the negative Y in mitral incompetence. Debate on whether the greater physiologic harm is related to the stenosis or the regurgitation, in a valve that is both narrowed and incompetent, becomes unproductive at a certain point, and I am at a loss to suggest a worthy new approach to the question.

About five years ago, when much of the time of my colleagues and myself was occupied with the argument of whether stenosis or incompetence was the dominant factor in a patient with disease of the mitral valve, one of our senior fellows happened to mention the problem to an engineer friend, who offered to do a detailed covariant analysis of all the data. A list of about 60 variables that had different values for stenosis and incompetence was collected from the laboratory, clinical and roentgenologic examinations, and programming was initiated. The obvious question arose from the computer expert, to wit, who will eventually make the separation of cases into those predominantly regurgitant and those predominantly stenotic? It was clear that such a separation could not properly be based on what the surgeon's finger felt or even on his observation of the valve when the heart was beating, certainly not on the pathologic examination, and not on any specific laboratory test, all of which properly led, temporarily at least, to abandonment of the program.

LABORATORY ASPECTS

Certain mistakes in interpreting laboratory data in years past would not be expected to be repeated, for example, the acceptance of a high gradient of diastolic pressure across the mitral valve as a sign of pure mitral stenosis when the heart rate is elevated. As an example of past error, in one patient suspected clinically of having predominantly mitral regurgitation, an operation for mitral stenosis was carried out because of an end-diastolic pressure of 20 mm. of mercury, and at operation the surgeon believed that the lesion was predominantly due to regurgitation and that he could accomplish nothing (fig. 4). The peripheral dye curve in this case showed no diagnostic deformation. A number of items on the record now obviously point to the mitral insufficiency; the height of the V wave itself is significant, particularly its ratio to the A wave. One may also identify the V wave transferred back into the tracing of pressure in the pulmonary artery (fig. 4). In this record it may be noted that the A wave is predominantly displayed in the left ventricular pressure tracing; this does not occur in tight mitral stenosis.

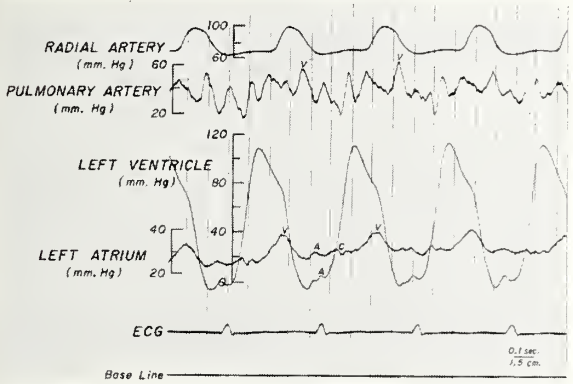

Fig. 4. Left atrial, left ventricular and pulmonary-artery pressures in a 20 year old man who underwent surgical exploration in 1956 for mitral stenosis and mitral insufficiency. The valve was estimated to be 1½ fingerbreadths in diameter. Noteworthy was the presence of an end-diastolic gradient of 22 mm. mercury despite the main hemodynamic defect, judged by the surgeon to be mitral incompetence. The A wave transmitted to the ventricle is noteworthy. (Courtesy of Dr. E. H. Wood.)

In the quantitation of mitral insufficiency there are four main technical aids, namely (1) the height of a V wave as already discussed, (2) the amount of distortion of the peripheral dye curve from a central injection, (3) the amount of dye that is regurgitated into the left atrium following left ventricular injection, and (4) selective angiocardiography with injection into the left ventricle. When gross valvular insufficiency is present, the disappearance slope of the dye curve is markedly prolonged. One may measure the distortion of the curve in a number of ways, for instance, the ratio of build-up time to disappearance time or, more recently, use of a simple derivative of the distortion, namely, the ratio of the least concentration following inscription of the primary curve to the recirculation concentration. In individuals with gross mitral insufficiency no recirculation peak can be recognized; then the ratio becomes greater than one. This is a roughly quantitative method of separating gross from mild mitral insufficiency, but it is regarded as providing supportive evidence rather than as being absolutely reliable when taken alone.

Tests for the quantitation of mitral regurgitation were not readily assessed in man so that animal experimentation seemed necessary to clarify certain issues. Sinclair and associates[17] produced mitral regurgitation with a punch with which holes of predictable size could be made in the anterior leaflet. In animals with these lesions there was excellent repeatability in the dye-injection results and it did not matter whether the left ventricular injection was made in systole, in diastole or during the whole cycle. They also found that the site of injection in the left ventricle did not produce any variation in the results. On the other hand, the site of sampling in the left atrium was important, the quantity of dye detected varying slightly with site. In general, however, the results were quite uniform. The correlation of the calculated regurgitant fraction with area of the defect was good for small defects of the mitral valve, but the linearity of the correlation disappeared as the defect became large. The studies suggested that in these animals the regurgitant fraction could not exceed 70 per cent without rendering the heart incapable of propelling an adequate forward flow to maintain life. The estimates of mitral regurgitation by the dye-dilution technic correlated well with those determined by the independent method of hydraulic formulas, wherein the regurgitant flows calculated from the mean systolic time and the difference in mean gradient gave results showing a linear relationship to the regurgitant flow determined by the dye technic.

It might be assumed that patients with mitral regurgitation would respond differently to tachycardia than would those with mitral stenosis, with the output more likely to be increased in the regurgitation group because rapid early ventricular filling is possible. However, this does not seem to be universally true in clinical cases or in animals with mitral regurgitation. In the latter it was found[17] that the forward flow was decreased with rapid heart rate and that the regurgitant stroke volume remained about the same; the regurgitant fraction was thus increased.

OTHER CONSIDERATIONS

The mitral regurgitation that may occur with dynamic obstruction to left ventricular forward flow needs passing mention. It is well recognized now that there occurs a subvalvular dynamic muscular obstruction[18] which the surgeon may have difficulty recognizing on his early acquaintance with the lesion. In such cases, associated mild to moderate mitral regurgitation may distract one's attention from the main lesion. In two patients it has been observed that the left ventriculo-aortic gradient was present at some times and not at others. The question arises whether the pulsus bisferiens in these cases could be related in part to transient giving away of the left ventricular valve in midsystole.

As stated earlier, patients having defects in the region of the atrioventricular canal may occasionally present with the clinical picture of mitral incompetence. In one instance, the left atrium was seen to be grossly enlarged and there was no atrial septal defect. With the typical electrocardiogram of left axis deviation the nature of the defect was immediately suspected.

In the combination of congenital defects labeled "corrected transposition," the left atrioventricular valve may be incompetent and the patient may present the clinical picture of gross "mitral regurgitation." This concept may be expanded with the question as to how to classify dynamically a case of true transposition of the great vessels with an intact ventricular septum and tricuspid insufficiency. The right ventricle is supporting the systemic pressure and supplying the systemic flow; if this valve becomes incompetent the condition is equivalent to mitral insufficiency clinically. Such a concept is not entirely in the realm of idle thinking, since it is possible to repair hearts with transposition of the great vessels by intra-atrial reconstruction to allow the pulmonary venous blood to enter the right ventricle and the aorta and allow the systemic venous blood to enter the left atrium, left ventricle and pulmonary artery. When such a correction has been completed it is obvious that it would have been well to start with a competent right-sided atrioventricular valve for, if after correction, the valve is incompetent, the clinical state is akin to mitral regurgitation, the V or right ventricular regurgitant wave having been transferred from the right atrium, jugular veins and liver to the left atrium.

Surgical Treatment

In introduction of the topic of surgical treatment of mitral incompetence, it seems proper to emphasize that one should review the reports of the surgeons themselves in regard to the details of the technical repairs, the risks and the overall late results.[19] Such reports, it must be emphasized, become rapidly outdated by the rapid progress being made in some areas of the field. It is important for any reviewer to separate the patients having pure mitral incompetence from those having combined incompetence and stenosis, particularly if the latter is associated with gross calcification. In my own institution the efforts of the surgeon in repairing the grossly incompetent mitral valve under direct vision have been very worth while; the operative risk has been low and the results have been generally satisfactory and occasionally brilliant. One type of valvular disease lending itself to a brilliant result is that of postsubacute bacterial endocarditis, with perforated mycotic aneurysm of the anterior mitral leaflet (fig. 5). Sometimes it is associated with perforation of an aortic cusp. In one reported case[20] of more than unusual interest the initial injury was a gunshot wound, but I believe that the lesion was a postinfectious one.

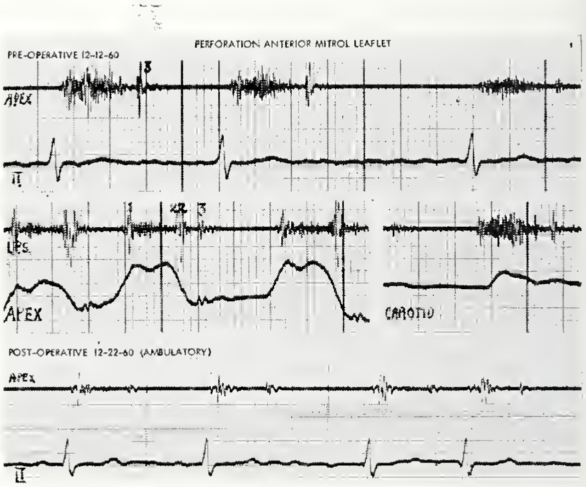
PERFORATION ANTERIOR MITROL LEAFLET
PRE-OPERATIVE 12-12-60
APEX
II
LPS
APEX
CAROTID
POST-OPERATIVE 12-22-60 (AMBULATORY)
APEX
II

Fig. 5. Phonocardiograms and apical cardiogram in a patient with ruptured mycotic aneurysm of the anterior mitral leaflet, and postoperative phonocardiogram after successful repair (by Dr. Dwight McGoon). Noteworthy in the preoperative record is the loud third heart sound associated with a minor thrust in the record of the apex beat.

In many cardiovascular laboratories there is widespread interest in the development of prosthetic valves. It is apparent that such a valve is the only answer for the calcified rigid mitral valve that is both grossly incompetent and stenotic. I have some fear that in the immediate future there may be some separation of medical and surgical thought and recommendations regarding surgical treatment along traditional Epimethean-Promethean lines, but I hope that the same conservatism in the selection of cases, with insistence on evidence of deterioration under a good medical program and on an evaluation of prognosis with and without surgical treatment, will prevail.

For more than a century, cardiologists have pointed out the not entirely gloomy prognosis for people with gross disease of the mitral valve. Particularly in the younger age group, one must suspect that heart failure may be associated with active carditis and that restitution of myocardial function may be possible.

The reduction in left atrial pressure, as well as the surgeon's immediate evaluation of his reconstructive procedure, is the best indication of success. As yet, no long-term survivals after the insertion of a complete mitral-valve prosthesis have occurred in our experience, although transient dramatic improvements have been observed. Of more than casual interest is the encouraging absence of thrombosis in man as compared to that observed in experimental work in the dog.

CONCLUSION

The main objectives in this communication have been to stimulate interest in the functional pathology of the mitral valve—to draw attention to the almost infinite variables that pertain to functional derangements of the mitral valve. Years ago, when the diagnosis of mitral incompetence was most unpopular, it was William Evans, I believe, who originated the remark when a student made the diagnosis of mitral incompetence, "There may be incompetence in this picture but it is not on the part of the valve but rather on the part of the physician." In the present era, with the validation of clinical signs by cardiac catheterization data and the surgeon's appraisal of valves, it is possible to make the diagnosis of mitral incompetence with confidence and be reasonably certain that the increased stroke work contributes significantly to eventual myocardial failure.

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Hand Injuries

A Common Sense Approach: A Guide for the General Practitioner

It has been estimated that half of all injuries are hand injuries. Certainly the principles involved in the care of injured hands should be a part of the knowledge of every medical student, general practitioner and surgeon. No surgeon, however, should feel compelled to treat a complicated tendon or nerve injury of the hand or one that involves a major skin loss. These major injuries to the hand usually require the treatment of a specialist qualified by training and experience to repair major hand injuries. The hand specialist crosses the boundaries of general surgery, orthopedics and plastic surgery, but usually masquerades as one of these. The primary aim in every hand injury should be primary healing of the wound.

The injuries to hands that can be easily handled and those that need attention of a specialist are discussed. Methods of handling various injuries are given.

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It has been said that there are eleven reasons for infections of the hand; the unmasked nose and mouth of the attendants and ten dirty fingers. Too many hand wounds are infected by those that care for these wounds.

The diagnosis of hand injuries is made in the same manner as any other surgical diagnosis and depends upon history, physical examination and x-ray. Probing should not be a part of the examination. A hand wound should never be probed, even with a sterile probe. Successful treatment of hand injuries, like successful treatment of other surgical diseases, is based upon accurate diagnosis. An attempt should be made to determine the mechanism and time of injury; other wounds should not be ignored. The history and location of the wound frequently will suggest the type of injury which can be expected. Attention should be paid during the taking of the history as to the time the patient had his last meal, since general anesthesia is usually preferable. This may suggest that the stomach should be evacuated before general anesthesia. If the patient has other serious injuries, the definitive treatment of the hand injury must be deferred and the aim of treatment must be only that of converting the open wound of the hand to a closed wound, and splinting the hand in the position of function.

More serious injuries to bone, tendon and nerves can be approached later, after the patient's general condition improves. Nerves and tendons can be successfully repaired or tendon graft performed in three to four weeks after primary healing of the wound. No serious hand injury should be treated surgically without the patient having a complete history, physical examination, blood count and urinalysis, as these procedures protect both the patient and the doctor. The examination of an injured hand involves an appraisal of the injury to the whole hand. In cases of multiple injuries the patient should have a complete evaluation.

The Management of Skin Loss

In every injury the skin should be carefully inspected; the location of any skin loss should be noted. If large flaps have been raised, their viability should be assessed. It is usually not desirable to suture avascular skin flaps because these usually die and predispose to infection.

Common Nerve and Tendon Injuries

Tendons and nerves must be covered if possible. This may mean an abdominal or local flap. Coverage wih split thickness grafts is not adequate for tendon or nerve coverage.

Following inspection of the skin, one should search for possible tendon and nerve injuries. These injuries are diagnosed by testing for loss of function. In the case of a tendon injury the patient should be asked to flex and extend his wrist, and to flex and extend his fingers. Inability to flex or extend the fingers or the wrist suggests a nerve or tendon injury or both. Inability to flex the distal phalanx of the thumb in the absence of a nerve injury is presumptive evidence of the division of the flexor pollicis longus. Primary suture, correctly done, is usually effective in restoring lost function. Inability to flex the distal phalanx of the index, long, fourth and fifth fingers is presumptive evidence of a complete division of the flexor digitorum, profundis to the respective finger. The test of radial nerve function is well known. Ability to actively extend the distal phalanx of the thumb, to extend the wrist, and the metacarpal phalangeal joints is evidence that the radial motor nerve is intact.

Median nerve function can ordinarily be assessed by asking the patient to oppose the thumb to each of the fingers (fig. 1).

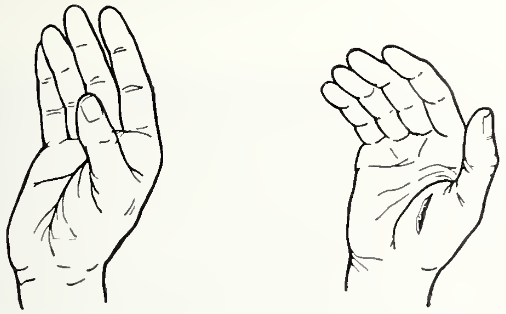

Fig. 1. The common laceration which divides the motor branch of the median nerve results in inability to oppose thumb.

When a median nerve is divided at the wrist, there will be anesthesia over the palmar aspect of the thumb, index and long fingers and radial half of the fourth finger (fig. 2).

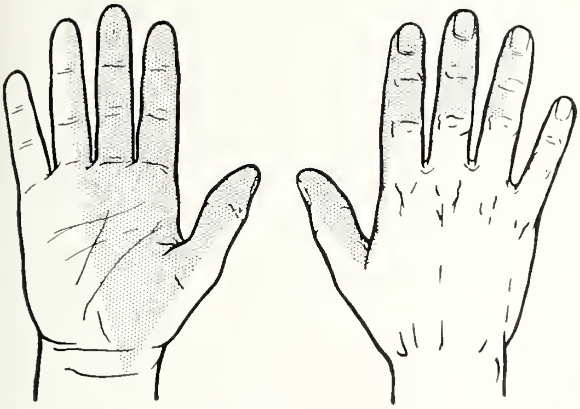

Fig. 2. Type of anesthesia seen with complete division of the median nerve at the wrist. Even superficial lacerations at the wrist frequently divide the median nerve.

Median nerve injuries should be suspected in lacerations at the wrist (fig. 3C) and lacerations over the thenar eminence on the palmar aspect (fig. 3B).

Ulnar nerve function can be assessed by asking the patient to adduct and abduct each finger against resistance and by loss of sensation over the ulnar aspect of the fourth finger and complete loss of sensation over the palmar aspect of the fifth finger (fig. 4).

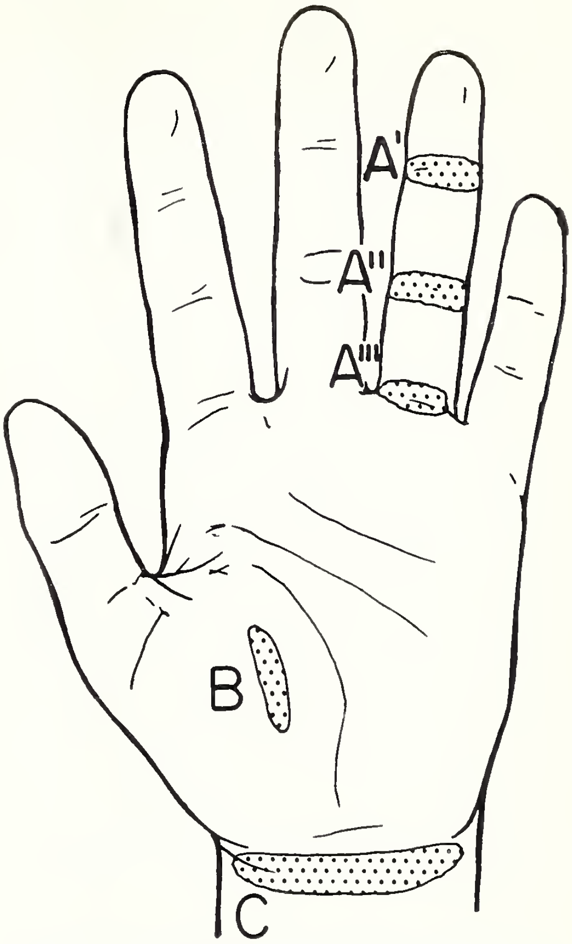

Fig. 3. Tendon and nerve injuries are extremely common at A, A, A, B and C.

Each finger should be tested with a tiny piece of cotton for light touch over its radial and ulnar palmar borders. Division of the digital nerves is

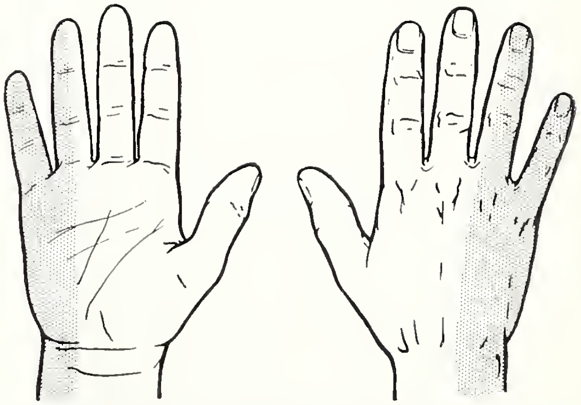

Fig. 4. Type of anesthesia seen following complete division of the ulnar nerve at the wrist.

common in lacerations of the fingers and satisfactory function does not usually follow this division, unless the nerve is sutured (fig. 3A). Suture of this nerve should ordinarily be done at the time the laceration is repaired. Failure to test for digital nerve sensory function will leave many anesthetic fingers which could be successfully treated if this simple test were done.

FRACTURES OF THE HAND

Fractures of the hand are extremely common and frequently mistreated. Fractures of the hand are diagnosed like fractures elsewhere by the presence of swelling, localized tenderness, deformity and crepitus. If a fracture is suspected, x-rays should be taken. For fractures of the phalanges and metacarpals two x-ray views are usually satisfactory. When the carpal bones are the site of the suspected fractures, an anteroposterior, lateral and two oblique views are frequently desirable. Even then fractures of the carpal navicular may be missed in the initial x-rays. When a patient complains of pain in the wrist and the hand is swollen and a tenderness is located in the anatomic snuff-box, an x-ray ten days after the injury with the four views previously mentioned may show a fracture of the carpal navicular that was missed in the previous set of x-rays. This stems from the observation that following a fracture, absorption takes place at the fracture line and this makes a hair-line fracture more evident.

Following the examination of the entire hand and x-rays, if necessary, the examiner should ask himself, "Is this a hand injury which I can treat or is this one that requires the attention of a specialist?" Patients who have avascular flaps which will require skin grafting or pedicle flaps, patients with tendon injuries, patients with damage to digital or major nerves or compound fractures, should ordinarily be treated by a specialist. The treatment in these cases for those who are not qualified by training and experience in the treatment of hand injuries should consist of application of a sterile dressing; this can ordinarily consist of four-by-fours and several ABD's, wrapping these lightly over the wound with a kerlix roll or sterile gauze bandage and an application of an Ace bandage. The hand then should be splinted on the dorsum or palmar aspect of the hand to prevent motion of the injured part or parts. This dressing will prevent contamination en route, control bleeding, will reduce edema and will add materially to the patient's comfort.

X-rays which have been taken should be sent with the patient; this will save the patient time, money and radiation. A telephone call to the referring specialist will make certain that your patient receives prompt attention when he arrives. Unless one is expert at repairing tendons and nerves and knows how to handle compound fractures, and is able to do major skin grafts including skin pedicles, refer the patient to a specialist. If such attention is impossible or not feasible, the only treatment that should be done is to close the wounds and treat the patient as if the injury were one of a laceration of the skin. When the wound is closed, the hand should be placed in a compression dressing with the hand in a position of function (fig. 5).

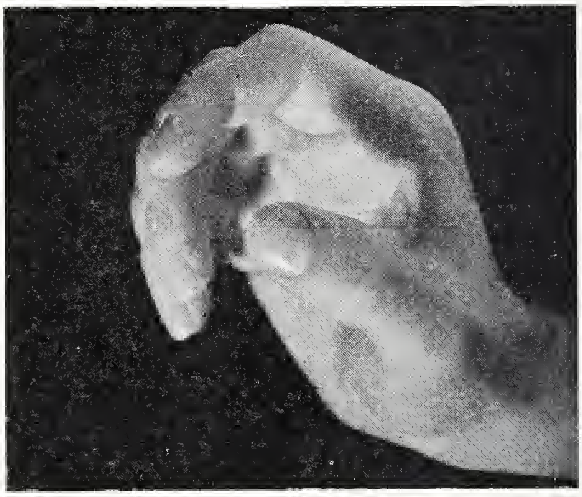

Fig. 5. Functional position of hand.

THE CARE OF COMMON SKIN LACERATIONS

Certain hand wounds, however, should fall under the care of the general practitioner. Perhaps a word is in order about the care of ordinary lacerations of the hand. Lacerations and puncture wounds of the hand are ordinary only when they heal by primary intention. Trivial or simple lacerations that fail to heal because of infection may mean weeks of suffering and economic disability to the affected patient. It has been said that there is no minor surgery, only minor surgeons. The truth of this is fundamental when applied to wounds of the hand.

Perhaps one should explain what is meant by adequate care of a simple laceration of the hand. Certainly, no surgeon, or nurse, or medical attendant of any kind should ever inspect a hand wound without being capped, masked and gloved. This applies not only to the doctor, but to the nurse, orderly and to the patient himself. No bacteria is more virulent than those the doctor brings to the patient. If the patient has been previously dressed by a lay person or by some other first aid attendant, all dressings should be removed with instruments. Following removal of the dressings, if there is an open wound, it is necessary to completely examine the hand. An examination of the hand means an examination of the skin, the nerve supply to the hand including digital nerves and a search for tendon injury and an examination for possible fractures, including an x-ray, if indicated. If, on a complete examination of the hand, the surgeon is certain that the only injury is a simple laceration, then he should proceed with treatment.

Every open wound of the hand should have the wound itself protected by a sterile dressing and the hand, the fingers and the forearm prepared for at least ten minutes with Phisohex or Ivory soap and sterile water. In case the hand is extremely dirty, this prep time should be extended. A brush should not be used. The reason a brush is undesirable for preparation of the hand previous to surgery is that a brush frequently does damage to already damaged skin. The hand must be scrubbed with the soap and water preparation and a soft sterile cloth. Following this ten minute preparation of the skin with soap and sterile water, the hand should be flushed with several liters of sterile water or saline. If there is minor bleeding this can frequently be controlled by a few minutes of simple pressure on the wound. Little arterial spurters should be grasped with fine forceps and ligated with 5-0 white silk. Other material may be used for ligating bleeders but the material should be extremely fine. Silk is preferable to catgut because it causes less reaction, but fine catgut may be used if desired.

After the skin has been carefully cleansed, a careful examination should be made to be sure that the skin flaps are viable. If the skin is grey-white or purple, it may be sparingly debrided. It should be remembered by those who are not used to debriding the skin of the hand that it is difficult to close a wound of the hand if much skin is removed. Leaving dead tissue, whether it be skin, muscle or frayed tendon, merely predisposes to infection. Nerves are not ordinarily debrided. If the wound cannot be closed without tension, split thickness skin grafts are frequently helpful. If a tendon or nerve is exposed, a split thickness skin graft is not satisfactory. This requires a pedicle coverage, either from a cross finger flap or from an abdominal pedicle.

As for the skin suture itself, I prefer 5-0 Ethicon Nylon on an atraumatic needle. Those who have not used this skin suture will find that it is an extremely fine one, and the needles which are attached to the suture handle well. Use instrument ties and touch the skin as little as possible. If the skin laceration is large, the patient will do better if it is done under general anesthesia. After suturing of the hand wound, the wound should be dressed by a few 4 by 4's and a large amount of fluffed 4 by 8's (or 4 by 4's). Three by 3's should be placed between the fingers to prevent skin maceration. The kerlix roll over this large bandage forms gentle pressure over the wound and prevents oozing into the wound. An elastic bandage similar to the Ace bandage applied with little tension tends to maintain gentle pressure over the wound and prevents a wound hematoma. If the laceration is on a finger, the finger should be splinted (fig. 6C, F, G); if the laceration is on the palm of the hand, then the palm of the hand should be splinted by a padded splint which crosses the wrist (fig. 6C). This compression dressing and splinting insures rest, prevents motion, decreases edema, decreases hemorrhage into the wound and decreases the incidence of infection. Attention to these principles which have been practiced for so many years by Dr. Koch and Dr. Mason of Chicago would do much to decrease the infection and crippling which so often follow a minor hand injury. At each dressing of the hand, the doctor should be masked again, dressings should be handled with instruments and the wound should be splinted until healing is achieved. Once the hand has healed, every attention should be made to encourage full motion of the fingers, for they stiffen so quickly, even in minor injuries.

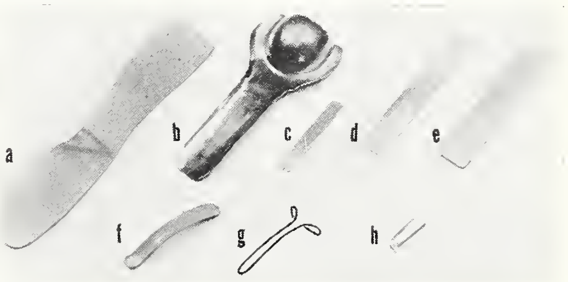

Fig. 6. Various types of splints.

Compound Fractures of the Hand

Compound fractures of the hand frequently involve the fingers and metacarpals. Compound fractures of the hand should be treated by an orthopedist. The patient should be referred after applying a sterile compression bandage and be splinted without other treatment. Many fractures of the hand, however, can be treated successfully and, in my opinion, should be treated by a general practitioner. Unstable displaced fractures of the fingers are difficult to manage. It has been said by a friend, that he would rather treat a fracture of the femur than an unstable displaced fracture of the finger. Certainly the average functional result following a fracture of the femur is better than an unstable comminuted fracture of the finger. These unstable displaced fractures should be referred to a specialist. The ordinary fracture of a distal phalanx with a splint is easily treated by protecting the distal phalanx with a splint for about two weeks (fig. 6H). After this, active motion of the finger should be encouraged. Undisplaced fractures of the finger are easily treated by means of a simple splint which can be made out of a coat hanger and adhesive tape (fig. 6G).

Finger fractures should not be splinted for more than three weeks. The commonest mistake in treating fractures of the finger is to splint them too long. Three weeks is enough. Do not depend upon callous; the callous appears late in finger fractures. The appearance of the callous has nothing to do with the time the finger is released from splinting and motion is started. Splint only three weeks, and after that encourage motion. The results will be much better. Always splint the finger in flexion and be sure the finger points toward the tuberosity of the carpal navicular (fig. 7). The amount of flexion should ordinarily be such that the distance from the tip to the palm is about one and one half inches (fig. 8).

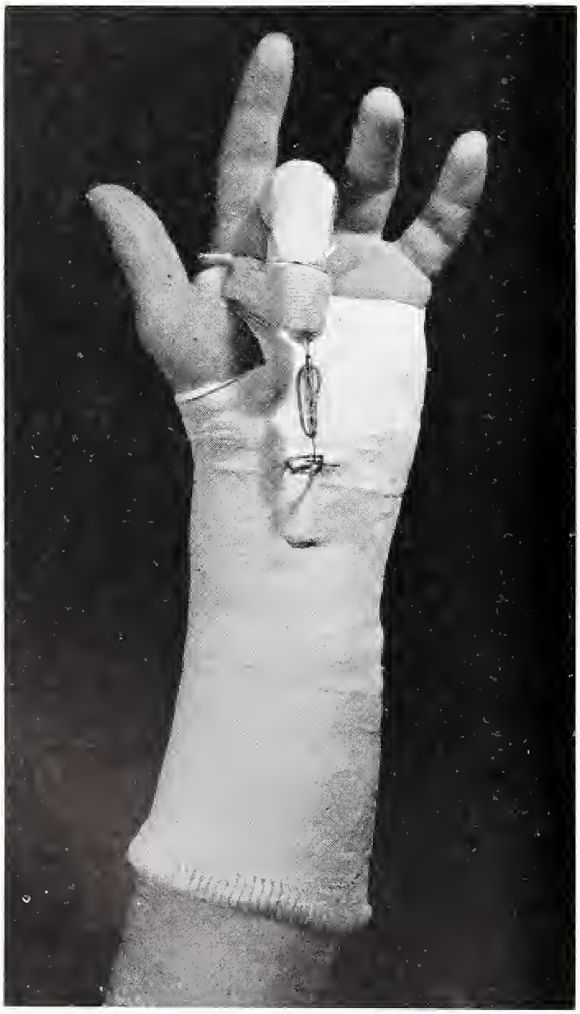

Fig. 7. The finger should be splinted with the finger pointing toward the tuberosity of the carpal navicular.

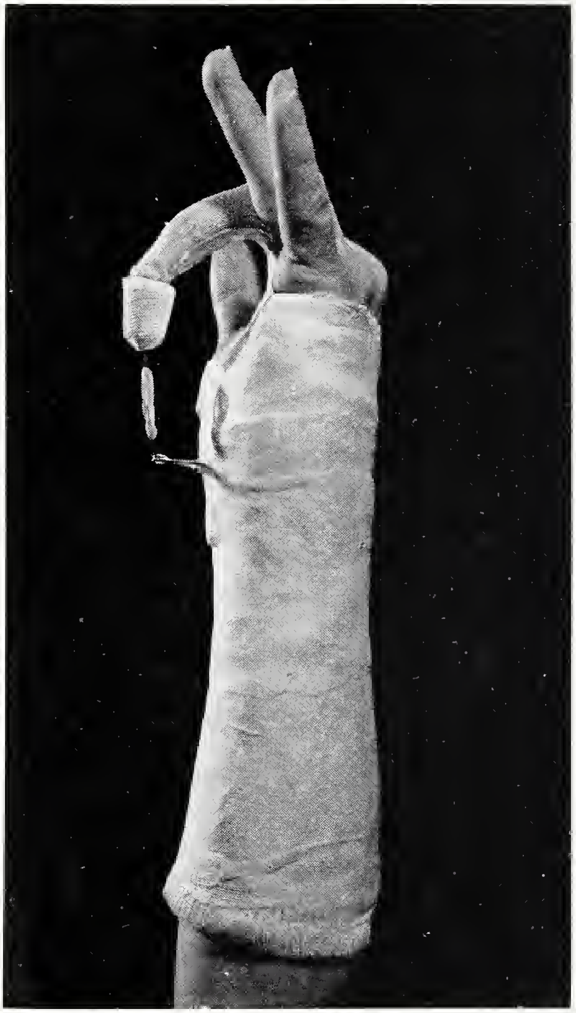

Fig. 8. The tip of the finger should be about one and one half inches from the palm.

Fractures of the Metacarpals

Fractures of the metacarpals are extremely common, and ordinarily occur about the mid shaft of the metacarpal. These are usually displaced. A cast which covers the forearm and comes on the palmar side of the hand to the distal palmar crease and just proximal to the knuckle is sufficient for most of these fractures. The fingers are not splinted at all; motion should be encouraged from the beginning. Many of these fractures will heal with a slight deformity. This will be minimal, however, and the function of the fingers will be excellent. Attempts to treat fractures of the metacarpals by skeletal traction should be abandoned, in my opinion. The result is stiffness of fingers. Severe finger fractures or fractures of the shaft of metacarpals with more than minimal displacement or angulation can ordinarily be easily aligned by using skin traction on a finger. A suitable and easily constructed cast, using collodion as the finger adhesive, is shown in figures 7 and 8. Three weeks of traction, followed by intensive physical therapy, i.e., warm soaks and active motions, should achieve as good a result as can be achieved in these difficult fractures.

BENNETT'S FRACTURE

Bennett's fracture is a fracture-dislocation of the metacarpal, carpal joint of the thumb. This fracture may be difficult to manage. It should be referred to a specialist. Fractures and fracture-dislocations of the carpal bones are not common. The only common fracture of a carpal bone is a fracture of the carpal navicular. This is the bone which is immediately distal to the radius, and the one that causes tenderness in the anatomic snuff-box, and frequently follows falls on the outstretched hand in athletic males in the twenties and thirties. This fracture was more common than the Colles' fracture during World War II. This fracture usually requires the forearm cast with the wrist in about 20 degree dorsiflexion and the thumb opposing the index finger (fig. 9). This cast should come to the distal palmar crease, just behind the kunckles and to the distal joint of the thumb. This fracture is slow to heal. Four to six months is perhaps the average healing time of this fracture. If this fracture is not immobilized long enough, the results of a nonunion will frequently be disastrous; the hand will be permanently crippled. Consultation in slow healing fractures of the navicular is frequently indicated. Dislocation of the lunate is unusual, but commonly missed. The patient with a suspected wrist fracture who complains of pain in the wrist and has numbness and tingling in the thumb, second and third, and radial half of the fingers, frequently has a dislocation of the lunate (fig. 2).

If a patient with a sprain of the wrist has not completely recovered in ten days to two weeks, it is advisable to send the patient or his x-rays to a specialist. Dislocations of the lunate are sometimes missed, even by radiologists, and occasionally by orthopedic surgeons. It is frequently desirable to seek consultation in so-called sprains of the wrist, if they do not recover in two weeks.

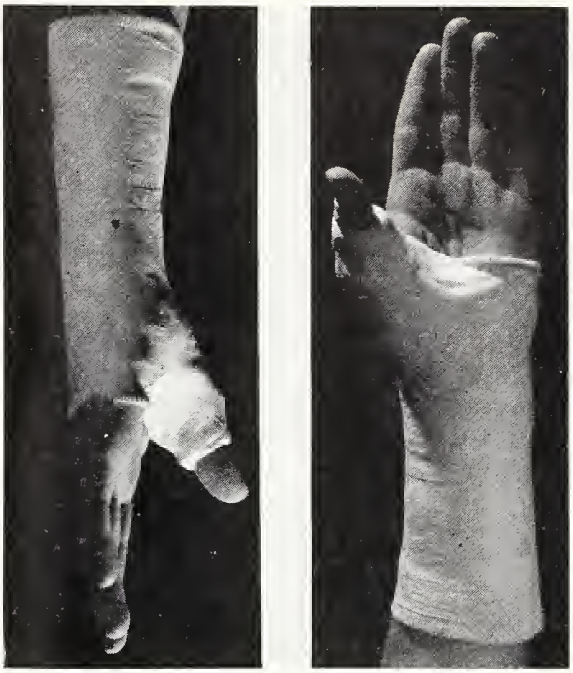

Fig. 9. Splinting for Bennett's fracture.

SUMMARY

A common sense approach to hand injuries is suggested. It is pointed out that consultation in hand injuries is frequently beneficial to doctor and patient. A review of the principles of diagnosis of hand injuries is stressed. A rather detailed description of the handling of lacerations of the hand is given in hopes of reducing the rather high incidence of wound infections following hand injuries. Tendon injuries, nerve injuries, compound fractures, wounds to the hand that require either split thickness skin grafts, cross finger flaps or abdominal pedicles should not ordinarily be treated by a general practitioner, unless they have had specialized training and experience in handling these wounds. It is suggested that the general practitioner confine his attempts at definitive treatment to lacerations, undisplaced fractures of the fingers, metacarpals and carpal bones. In doubtful cases, consultation with the specialist may be desirable.

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Familial Periodic Paralysis

Pathogenesis, differential diagnosis and prognosis of the syndrome of periodic paralysis are discussed and a case report is presented.

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Familial periodic paralysis is a genetically determined metabolic abnormality of unknown etiology characterized by periodic attacks of flaccid paralysis associated with a sharp drop in extracellular potassium concentration, without external (urinary or fecal) loss of potassium. The many causes of potassium loss via renal and/or intestinal mechanisms which may result in muscle paresis or paralysis are excluded by this definition. The incidence of this peculiar syndrome is unknown, but the presence of more than 500 cases in the recent medical literature would indicate that it is probably not as rare as is popularly thought. There is a definite male preponderance (2:1 to 3:1) and the onset is usually in infancy or early adult life. Attacks generally are more severe in the younger age groups and tend to decrease in severity later in life. There is no known racial predilection. The mode of transmission is unknown, but in some instances the abnormality is transmitted as a dominant trait, in others as a recessive.

The history of the patient with periodic paralysis usually reveals attacks occurring during the night or early morning, frequently attended by a history of heavy carbohydrate intake and/or emotional upsets. There is usually no prodromal phase, and the degree of paralysis may be mild and focal, or may be generalized and progress to the point of respiratory paralysis and death. The attacks usually last for two to eight hours and are not accompanied by changes in the sensorium or in the level of consciousness.

History

Syndromes characterized by periodic bouts of paralysis have been described in the past, the earliest known case being that of Musgrave in London in 1727. This interesting case report is transcribed in toto by Talbott. Articles describing sporadic cases of periodic paralysis began appearing in the German literature in the early 19th century. Following the publication of Cavare's paper in 1853, several cases were reported in the French literature. The first description of the familial form was that of Shakhnowitsch in 1882. Putnam in Boston first noted the relationship of high carbohydrate intake to attacks of periodic paralysis in 1900. Biemond and Daniels first reported the association with hypokalemia in 1934; the first study of potassium metabolism in this disorder was that of Ferrebee, et al. in 1938.

In the last 20 years there have been multiple extensive studies accomplished in attempts to define the etiology and pathophysiology of this syndrome, but a review of Talbott's comprehensive study in 1941 reveals that little of significance has been added since that time.

Case Report

J. B., a 35 year old Negro male, was admitted to the Kansas City General Hospital for the first time on October 11, 1960, with a chief complaint of weakness of the legs of one day's duration.

The patient was in his usual state of good health until the morning of October 10, when, upon awakening, he noted weakness of both arms and legs. The weakness persisted throughout the day and he presented himself to the emergency room of another hospital that evening, where no findings could be elicited and he was given salicylates. The generalized weakness persisted, and upon awakening on the morning of October 11, he was unable to get out of bed. He was then brought by ambulance to the General Hospital and was admitted for evaluation.

The patient denied previous illness, vomiting, diarrhea, chills or sensory changes. He had taken no medications or unusual food or drink. No members of his family were ill. He had not had polio immunizations or other injections within the last year.

The patient recalled a similar episode of weakness at age 12, which persisted for two days and which cleared spontaneously. There had been no other similar episodes.

The remainder of the history was entirely normal except for the highly interesting finding of the diagnosis of polio in his 3 year old son in 1959. The child had recovered from this attack of paralysis without any residual muscle atrophy and the spinal fluid had been reportedly negative at the time of the diagnosis. There was no known history of periodic attacks of weakness in any other member of the family (including six siblings and six children).

Physical examination upon admission revealed temperature 98.2F., blood pressure 140/80 and pulse 72. The entire examination was within normal limits except for the neuromuscular findings. There was no cranial nerve abnormality. Muscle strength of the quadriceps, hamstrings, peroneals and gastrocnemii was markedly diminished bilaterally, being graded 1+ or 2+ on a scale of 4. Muscle tone in these groups was markedly decreased. There was minimal weakness of the muscles of the upper extremities bilaterally. The patellar and Achille's tendon reflexes were present but markedly hypoactive. (The examination was conducted shortly before the attack subsided.) No sensory changes, abnormal reflexes or cerebellar abnormalities could be elicited.

The diagnosis of hypokalemic paralysis was suspected and was confirmed by a serum potassium of 2.65 mEq./L. This finding was triple-checked. The electrocardiogram was interpreted as showing only questionable T-wave flattening; however, these changes were more apparent in retrospect when compared to an ECG done on the third hospital day, when the serum potassium was 5.1 mEq./L.

The patient was started on oral potassium chloride solution and within six hours of admission had full recovery of muscle function. The part that the potassium therapy played in the recovery is debatable, since the patient was in the process of recovery when admitted.

The Hb was 12.5 gm. per cent; white blood count was 10,500 with a normal differential; urinalysis normal, with specific gravity 1.015; VDRL nonreactive; blood sugar 74 mg. per cent; BUN 11 mg. per cent. A lumbar puncture yielded crystal clear fluid with normal dynamics; the spinal fluid sugar was 73 mg. per cent, protein 36 mg. per cent, chlorides 735 mg. Kolmer negative and 3 wbc/mm^3 were counted. A chest x-ray and plain film of the abdomen revealed no abnormalities.

The initial serum electroytes were Na 144, K 2.65, Cl 109 and CO_2 30.0 mM/L. On the following morning, when the patient was asymtomatic, the values were Na 144.5, K 5.4, Cl 107 and CO_2 22.7 mM/L. The endogenous creatinine clearance was 92 cc. per minute.

The patient was put on a potassium balance regimen from October 18 to October 27. Although the stool assays were of questionable accuracy, the potassium intake and urinary excretion were well controlled and were normal (urinary excretion 30 to 64 mEq. per 24 hours).

On October 25 and 26 the patient was given provocative tests consisting of a late evening meal of 300 gm. carbohydrate plus subcutaneous injection of adrenalin in oil. No clinical abnormalities developed, nor was any change in the potassium balance study elicited.

The nature of the syndrome was explained to the patient, and he was released from the hospital at his request on October 27. Evaluation of the child who had had "polio" was also contemplated, but neither the patient nor the child have kept their clinic appointments.

DISCUSSION

It has been unequivocally demonstrated that the attacks of paralysis in this syndrome are related to a shift of potassium from the extracellular fluids into the cells, particularly of muscle. There is no concomitant loss of potassium through renal or intestional mechanisms. The result of this electrolyte shift is loss of contractility of striated muscle, without neural or neurohormonal abnormality. The existence of primary muscle defect is confirmed by the "cadaveric" electromyographic response; i.e., no contraction with direct stimulation of the muscle. Exhaustive balance studies have failed to reveal any consistent abnormality in electrolyte or water physiology aside from the potassium shift; indeed, there have been recent reports of hyperkalemic periodic paralysis, the existence of which merely adds confusion to an already puzzling situation.

Zierler et al. present suggestive evidence that the patient with periodic paralysis has a chronic muscle-potassium deficit, and that replacement of the depleted extracellular potassium is thereby delayed. There is also suggestive evidence that a diurnal shift of potassium normally occurs, with the "extracellular fluid-to-muscle" phase occurring during the night. It has therefore been postulated that periodic paralysis represents a hereditary chronic muscle potassium deficiency, with the clinical syndrome of paralysis being precipitated by a normal electrolyte shift alone, or by the normal shift plus other aggravating factors. At the present time this theory is the most plausible, but conclusive evidence is lacking.

DIFFERENTIAL DIAGNOSIS

Periodic paralysis is most frequently confused with conversion reaction, particularly if the familial history is not elicited. Various neuromuscular disorders, such as myasthenia gravis, Guillan-Barré syndrome, anterior poliomyelitis and muscular dystrophy bear a superficial resemblance to periodic paralysis, especially on initial examination. The absence of neurologic changes and the presence of hypokalemia effectively rules out many of these diseases as well as Addison's disease. In the absence of facilities for determining serum potassium, the electrocardiogram will usually show the typical changes of hypokalemia.

More difficult to rule out are various pathologic entities characterized by muscle paresis or actual paralysis, and hypokalemia due to excessive external loss of potassium. These include chronic nephritis and renal tubular diseases of certain types; hyperadrenocorticism, endogenous or iatrogenic; prolonged therapy with thiazide drugs without potassium replacement; ureteroenteric anastomoses; sprue, and others. Hypokalemic paresis has also been reported in conditions favoring rapid glycogenesis, including treated diabetic acidosis, following injection of adrenalin or insulin, and following the ingestion of a heavy carbohydrate meal.

It is apparent, therefore, that a careful history and a potassium balance study are the requisites for arriving at a diagnosis of periodic paralysis, the sine qua non being the demonstration of a low serum potassium level during an attack of paralysis. If the syndrome is suspected, an attack of paralysis can frequently be precipitated by ingestion of a heavy carbohydrate (more than 250 gm.) evening meal, with concomitant administration of insulin and/or adrenalin upon retiring. Since the attacks frequently occur during sleep, the patient must be closely observed during any provocative test.

Prognosis and Treatment

The clinical course is extremely variable, some patients having but one or two attacks throughout life, others having daily attacks. Obviously, no therapy is indicated unless the attacks are of significant severity, in which case the primary therapeutic measures are restriction of carbohydrate intake at any given time, and administration of potassium salts, either prophylactically or as the specific measure during an attack. Maintenance of an adequate airway and preservation of good ventilatory function are of primary importance in the severe syndrome with respiratory failure.

Summary

The syndrome of periodic paralysis is presented from the standpoint of pathogenesis, differential diagnosis and prognosis. An illustrative case is presented.

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HUGH H. HUSSEY, JR., M.D., *Washington, D. C.*

Drug Industry Antitrust Act

Special Article

The statement of the American Medical Association on S. 1552, 87th Congress, the Drug Industry Antitrust Act, before the Committee on the Judiciary, Subcommittee on Antitrust and Monopoly of the United States Senate, was presented by Dr. Hussey. It was presented on July 5 and gives the position of the American Medical Association concerning the pharmaceutical industry.

Dr. Hussey is Chairman of the Board of Trustees of the American Medical Association.

Mr. Chairman and Members of the Committee:

I am Dr. Hugh H. Hussey, Jr., of Washington, D. C. I am appearing here today as the Chairman of the Board of Trustees of the American Medical Association. I am also the Dean of the School of Medicine of Georgetown University. With me are Dr. Ernest B. Howard, Assistant Executive Vice President of the American Medical Association, C. Joseph Stetler, General Counsel, and Joseph Jerome, Ph.D., Assistant Secretary of the Council on Drugs.

The American Medical Association, as the national association of the physicians of the United States, has a serious and long-standing interest in drugs and any legislation concerning them. We have not, however, taken any position on S. 1552, as a whole, inasmuch as certain of the proposals in the bill, such as the Sherman Act and patent law amendments, are outside our area of competence. We will direct our remarks primarily to several of the provisions in Section 4, dealing with proposed amendments to the Federal Food, Drug and Cosmetic Act. These proposals will, in our opinion, directly affect the practice of medicine and the public health and are therefore within the area of knowledge of physicians and the AMA.

Inasmuch as Section 4 of the bill proposes extensive amendments to the Federal food and drug laws, I would like to review briefly the history of the position of the American Medical Association with respect to this type of legislation. As early as 1891, the AMA went on record as supporting the first proposals for a federal food and drug law. It was not until 1905, however, coincident with the establishment of our Council on Pharmacy and Chemistry, later to become the Council on Drugs, that the Association threw its full weight into the struggle for a federal pure food and drug law. The statute was enacted in 1906 following intensive legislative efforts by the AMA. Through the years the AMA has closely followed the implementation and effectiveness of the 1906 Act. As early as 1911 the Association urged Congress to amend the Act so as to prevent false statements being made as to the results to be obtained from the use of medicinal agents.

In 1933 the AMA, realizing that the existing Act had certain deficiencies, urged "the formulation and enactment of effective national food and drug legislation adequate for the protection of the people." Activities of the Association were instrumental in the passage of the present Federal Food, Drug and Cosmetic Act in 1938. In 1951, we supported the Durham-Humphrey Amendment, which is the law controlling the dispensing of prescription drugs. In 1953, the AMA supported a bill, which was enacted as Public Law 217, 83rd Congress, authorizing the Food and Drug Administration to inspect pharmaceutical manufacturing establishments without first obtaining the permission of the proprietors. Only last year, the AMA was one of the chief sponsors and supporters of the Hazardous Substances Labeling Act, which was enacted by the Congress as P.L. 86-613 and is now administered by the Food and Drug Administration. The AMA is justly proud of its long history of support and sponsorship of legislation so directly connected with the public health and well-being.

It should be noted that medicine has not limited its interest in food and drug matters to legislation. We have supplemented our legislative activities with a close and continuing relationship with the Food and Drug Administration. Our Council on Drugs, over the years, has had a number of members from the FDA, and numerous other government physicians and pharmacologists have served as consultants to the Council on its drug evaluation program. Our Department of Investigation has enjoyed a long-standing close relationship with FDA in developing information on quackery and medicines and devices of questionable value.

At the present time, the AMA and the FDA are formulating final plans to act as cosponsors of a National Congress on Medical Quackery, to be held in Washington, D. C., on October 6-7 of this year.

Our Committee on Cosmetics and the former Committee on Toxicology have also worked closely with FDA over the years, most recently concerning the Hazardous Substances Labeling Act. The Council on Foods and Nutrition is most active in exchanging information with FDA and in cooperating with it, the Federal Trade Commission, and the United States Post Office in sponsoring an aggressive program against food faddism and food and vitamin quackery.

With this record of AMA support and cooperation in food and drug matters as background information, I would like to comment on those sections of S. 1552 which concern us directly as physicians and which will directly affect the practice of medicine and the public health.

Section 4, Part (7) of the bill provides that a drug manufacturer must include with any drug information transmitted to physicians (A) a copy of all printed matter, which the Secretary of HEW has required to be included in any package in which the drug is distributed, and (B) in the case of a new drug, a complete statement of all findings of fact made by the Secretary with respect to that drug.

The manufacturer must include in all advertisements and other printed matter issued, including those in medical journals, (A) the official name in addition to the brand name, (B) warnings, prefaced with the approval of the Secretary, as to any dangerous or harmful property of the drug, and (C) a full and correct statement of the drug's efficacy.

Section 4, Part (13) proposes among other things that a new section 510 be added to the Federal Food, Drug and Cosmetic Act, which section would direct the Secretary of HEW to compile, publish and distribute to physicians, annually and at such other times as he deems necessary or desirable, a list of drugs which have the potentiality of serious, dangerous or harmful effects, and would also require the Secretary to publish and distribute to physicians and others copies of all printed matter which he has required to be included in any package in which any drug is distributed or sold.

Before commenting on these proposals, let me cite the aims we, as physicians, are desirous of achieving.

—We want all physicians to be well-trained and fully informed on all aspects of the practice of medicine.

—We want this body of knowledge and reservoir of skills to include a high degree of competency in the selection and proper use of drugs.

—We want a continuing and expanding flow of useful drug products placed at the disposal of these physicians.

These are some of the aims we seek and which we have diligently pursued for more than a century. And since the American people now enjoy the finest medical care in the world, we believe that the aims have been effectively pursued.

There is still room for improvement. Physicians can be even better trained and even better informed. The improvement of existing drugs and the search for new ones can be accelerated. And the quest must continue for the means by which even better medical care can be made available to more and more people.

As I have pointed out in the first part of this statement, the American Medical Association has never hesitated to sponsor or endorse federal legislation in the health field when our experience as physicians indicated that such legislation is necessary. On the other hand we recognize that there are problems in the health field which are not—by their very nature—susceptible of solution by means of legislation. We believe that in these instances the profession can and should utilize other technics and resources not at the disposal of the federal government. In this vein, let me review the activities of the AMA in supplying information to physicians on drugs, their uses, dosage forms, side effects and hazards.

Our Council on Drugs was founded in 1905 (as the Council on Pharmacy and Chemistry) and has since that time borne well its responsibility of informing physicians concerning drugs. The general purposes of the Council are stated in the current edition of one of its publications, "New and Non-Official Drugs," as follows: "The function of the Council on Drugs is to examine and evaluate available evidence relating to the actions, uses and dosage, hazards and other pertinent properties of drugs and to encourage rational therapeutics by timely, informative reports to the medical profession."

The Council, through the years, has informed the medical profession of its evaluations of drugs by publishing complete monographs on individual drugs in *The Journal of the American*

Medical Association, which goes to every member of the Association and thus to virtually every practicing physician. It has also published annually, since 1906, the previously mentioned "New and Non-Official Drugs," a bound volume of some 700 pages which contains the Council monographs and other pertinent drug information. Recently, the Association's Board of Trustees approved a greatly expanded drug information program, the purpose of which is to bring to physicians even more complete information and sound considered opinions on drugs as currently, expeditiously and scientificially as possible.

The American Medical Association's expanded drug information program will include:

(1) Submission by pharmaceutical manufacturers, to the AMA, of copies of their pharmacologic, toxicologic and clinical data submitted at the time of a new drug application to the FDA and as they become available thereafter.

(2) Analysis by the AMA of these and other data submitted. The council will, after the FDA allows a new drug application to become effective, publish a preliminary statement containing informative material for the physician. The statement will be published in the weekly *Journal of the American Medical Association* in the section specifically devoted to that purpose. The AMA will continue to keep posted on all developments concerning drugs previously reported and will report this information in *The Journal* in a column "New Drugs and Developments in Therapeutics."

(3) The preliminary statement on drugs, the subsequent statements of information published in *The Journal,* and other information becoming available during the first several months of general use of the drug, will be combined into an extensive monograph to be included in "New and Non-Official Drugs." The drug monographs in "New and Non-Official Drugs," which is a hard-cover textbook, provide the following information to the physician: chemical or biological identity, including pertinent properties; actions and uses, associated side effects, toxicity and precautions; and dosage and routes of administration.

(4) The publication annually of a new handbook on drugs entitled *A.M.A. Handbook on Drugs.* The handbook will include evaluated information taken from *The Journal* and elsewhere and will cover single entity drugs and drug mixtures identified under class headings. The handbook will contain a digest of essential information designed to inform the physician on: (1) the nonproprietary and the trade name of the drug, (2) the name of the manufacturer, (3) a quantitative statement of composition by generic name(s), (4) the claimed indications for the drug, (5) the stated contraindications, side effects and precautions, (6) the manufacturer's recommended dosage, (7) the available dosage forms, and (8) an overall appraisal of the drug.

This handbook will be kept current by the publication and distribution of quarterly supplements and the weekly reports published in *The Journal.* A more detailed description of the AMA drug information program is attached to this statement.

The program is being implemented at present and will be completely operational by 1963. In addition to the publications now furnished to physicians, the new drug handbook and quarterly supplements will be distributed to all members and will also be available to nonmembers.

In addition to this program, the AMA has recently undertaken participation in a drug standards laboratory located in Washington, D. C., at the headquarters of the American Pharmaceutical Association. The laboratory will expand the development and checking of specifications for new drugs and will assist in publishing reports on them. It will assist in checking stability and purity, and will launch new studies of general drug characterization and identification. Problems of standardization will be explored and new methods of analysis will be developed.

This program, formally approved in May, is supported financially by the American Pharmaceutical Association, the United States Pharmacopoeia, and the AMA and is directed by a joint committee of the participating groups.

We believe that the continuing education of physicians is the primary responsibility and prerogative of the profession itself and associated groups. We are now participating with the Association of American Medical Colleges, the American College of Physicians, the American College of Surgeons, the American Academy of General Pactice and others in a project designed to expand and improve postgraduate educational facilities and programs. This important activity, together with the expanded drug information program, should insure the dissemination to the practicing physician of complete, objective and authoritative information on new drugs when they are first introduced, and up-to-date information on all significant developments in drug therapeutics.

In summary on this point, we believe the information programs designed and administered by the medical profession itself will continue to be effective to that end and that the passage of a law for this purpose will be less effective.

I would next like to comment on that section of Part (13), Section 4 of the bill entitled "Review of Official Names of Drugs." This section, among other things, would add a new section 509 to the Federal Food, Drug and Cosmetic Act. It would give the Secretary of HEW the authority to determine the official name of any drug, which would be the only official name of a drug that could be used in an official compendium. The Secretary would also be given the authority to review periodically all official names of drugs to determine whether any revision of those names is necessary.

For many years the AMA has played a leading role in the adoption of a drug's nonproprietary (official) name. The procedure was explained in some detail in our recent correspondence with the Committee and is repeated in *Exhibit B* attached to this statement. I will not repeat the lengthy explanation included in the Exhibit, but for the benefit of the Committee members I will summarize briefly the present procedure.

Simultaneously with the early development of a new drug, consideration of a nonproprietary name is begun. It is the policy of the AMA that the early adoption of a nonproprietary name should be encouraged to facilitate understanding of the properties and proper usage of the drug. It is also our policy that the nonproprietary or generic name should be as simple as possible and that chemically related drugs, used within a given therapeutic area, should preserve some relationship in their nonproprietary names.

In order to improve and streamline the naming process, the AMA and the U. S. Pharmacopoeia recently formulated a joint program for the adoption of nonproprietary names. The objectives of this program are to facilitate the selection of suitable nonproprietary names for drugs and to encourage the use of such names wherever indicated in labeling, in advertising, as titles in the official compendia, and in the scientific literature. The new program represents a dove-tailing of the nomenclature interests of the AMA and the U. S. Pharmacopoeia. Briefly, it consists of the modification of the Nomenclature Committee of the Council on Drugs. The joint AMA-U.S.P. Nomenclature Committee consists of two members appointed by the AMA and two members by the U.S.P., and is staffed by the AMA. It is the responsibility of the Committee, after consultation with FDA and after working and negotiating with the pharmaceutical manufacturer, to designate the nonproprietary drug name which will then be adopted by both organizations. In the event that a decision cannot be reached between this joint committee and the manufacturer as to the nonproprietary name to be assigned, either the committee or the manufacturer may take the matter to a Nomenclature Review Board, appointed by the U.S.P., which will determine the merits of the controversy and make the final decision as to the name.

In addition to facilitating the adoption of nonproprietary names, the new program should result in a faster and much wider dissemination of the newly adopted nonproprietary names of drugs. As in the past, all interested cooperating agencies throughout the world will be consulted for their comments.

The U.S.P. will adopt the name so selected as the U.S.P. title, when and if the drug concerned is admitted to the U.S.P., and will also undertake to publish lists of the names at frequent intervals. The AMA and the U.S.P. will organize a concerted campaign to acquaint the editors of all medical and pharmaceutical journals of the availability of nonproprietary names for all drugs that are likely to be the subject of published articles.

The American Medical Association believes that the system of adopting nonproprietary or generic names for drugs has been reasonably effective in the past, and that the new joint Nomenclature Committee will make it even more effective and expeditious in the future. Further, the close cooperation of the AMA and U.S.P. in this program will greatly increase the use of such names and eliminate any confusion or possibility of confusion that may exist at present.

In summary on this point, we believe that the problems which remain in the field of drug nomenclature can and should be solved by the profession itself. Physicians will adopt and use nonproprietary names for drugs only when they are convinced that the use of such names will facilitate and improve their practice of medicine. We believe that the programs I have described will be most convincing to them. We do not believe that the suggested legislative alternatives will.

I would now like to direct my comments to other provisions of S. 1552 which cause us serious concern. They are those parts of Section 4 of the bill which would grant to the Food and Drug Administration the authority to determine, evaluate and pass on the efficacy of new drugs. In the same vein, we are concerned with Part (b) of Section 3 of the bill, dealing with patent law amendments, which would give the Secretary of Health, Education, and Welfare the authority to determine whether the therapeutic effect of a drug modification or combination is "significantly greater" than that of the drug so modified. Under this latter authority, a patent could not be issued for the drug until the Secretary had determined that the therapeutic effect was significantly greater.

Our concern with these sections of the bill stems from many sources. As we understand them, they are intended to reduce the number of drug products on the market and to prevent a non-efficacious drug from ever reaching the market. Although physicians do not want useless drugs cluttering up the practice of medicine and although it is difficult for physicians to become familiar with all of the drugs which have become available during the past two or three decades, we are convinced that the Food and Drug Administration cannot solve these problems for us. I would like, now, to discuss the basis for this conviction.

The first item to consider is the possibility of useless drugs appearing on the market because the Food and Drug Administration does not now have the authority to stop their production and distribution. In discussing this matter, it is well to remember that we are talking about products which will be consumed only if they are prescribed by a physician. Hence, his training and experience, his continually expanding knowledge of drug therapy, and his professional responsibility to his patient, act as powerful barriers to the sale of useless drugs. Secondary barriers exist in the adverse economic results which would generally follow for a pharmaceutical manufacturer who attempted to market a useless prescription drug.

A second and more important reason for our concern over these parts of Section 4 of the bill arises out of an understandable but nevertheless extremely important misconception on the part of many of the term "efficacy" as this term is used in medicine. Physicians seek to treat effectively the medical problems of individual patients. A physician does not treat ten cases of hypertension, he treats ten individual patients, each of whom has a medical problem he has diagnosed as hypertension. This difference becomes especially important when he elects to use drug therapy in the treatment of these ten individual patients. He may find that the same dosage of the same form of the same drug will be efficacious in each and all of his ten patients. Or he may find that one or more of them need different dosages, or different forms of this same drug. He may, indeed, find that one, two or three of them are allergic to the non-active ingredients used in this brand of the drug and that a different brand, with other non-active ingredients, is the efficacious answer. Thus, in one patient, a specific dosage of a specific drug might be said to be efficacious. While in another, it would be described as totally ineffective.

The point I am making is this. A drug's efficacy varies from patient to patient, sometimes for known reasons such as allergy, and at other times for unknown reasons. Hence any judgment concerning this factor can only be made by the individual physician who is using the drug to treat an individual patient. A physician can be told many things about a drug, including its chemistry, its mode of action and, to some extent, its toxic properties. But he must judge its efficacy. If this precise usage of the word "efficacy" is kept in mind, the consideration of legislation which would request that an administrative agency of government determine the efficacy of drugs can proceed more fruitfully.

Unfortunately, even we physicians use the word "efficacy" in a different context when we compare drugs and when we compare drug therapy to other forms of treatment. It is not unusual for clinical investigators to say that drug X is more effective than drug Y in the treatment of a disease or that drug Z is ineffective. And in most instances they leave out the intended qualifying phrase "on the average" or "in general." Within the medical profession this omission is not critical since every physician understands its implication. But in discussing the legislation under consideration, these qualifying phrases are extremely important. A drug which is, on the average, less efficacious than another, must still be available to every physician since it may be completely efficacious in treating the medical problems of one of his patients. We do not practice medicine on the average—we seek to solve or alleviate the problems of each and every patient.

These considerations then are the basis for our concern with those parts of Section 4 of the proposed bill which would grant to the Food and Drug Administration the authority to determine, evaluate and pass on the efficacy of drugs.

We realize that the literal effect of the proposed amendments to the Food and Drug Act would be to give the FDA the power to evaluate the efficacy of a new drug only in light of its efficaciousness in use under conditions prescribed, recommended, or suggested in the labeling. We are concerned with this apparently limited grant of authority and with the very distinct possibility that, by granting a governmental agency the statutory authority to pass on the efficacy of a new drug, Congress will be enabling that agency through administrative interpretation of the law to decide the relative or comparative efficacy of a new drug in terms of drugs already on the market. We are apprehensive that the Food and Drug Administration would, under these amendments to the Act, decide that it had the authority to refuse to allow a drug to be marketed merely because it was, in their opinion, not the most efficacious drug for the purpose intended or was not as efficacious as one might ideally wish.

A physician is trained during his many years in medical school, internship and residency, and continuously learns after he enters into the practice of medicine, to use his professional judgment in determining what particular drug is best for a particular patient suffering from a particular disease or condition. We believe that only the physician has the knowledge, ability and the responsibility to make that decision in regard to that particular patient and that he should not be deprived of the use of drugs that he believes are medically indicated for his patient by a governmental ruling or decision. This would be the resulting situation, in our opinion, if these proposed amendments were enacted into law. Medical history and experience clearly demonstrate that the only possible final determination as to the efficacy and ultimate use of a drug is the extensive clinical use of that drug by large numbers of the medical profession over a long period of time.

It is frequently impossible for any person or groups of experts or a governmental agency to determine before hand that a drug is going to be efficacious or non-efficacious for a particular condition, or that a drug will be of no benefit in the treatment of other diseases and conditions. The history of medicine and pharmacology clearly indicates that only by extensive clinical experience in depth and wide usage can the true efficacy of a drug for the treatment of a particular condition be established. Moreover, and equally important, we know that many of the drugs we use today in treating particular conditions were never originally intended for such use and it was only through trial that the value of these drugs was discovered.

Even with the vast information resources at the disposal of the AMA we realize that the patient's physician must still be free to decide which drug will be most effective in the treatment of his medical problem. It is for these reasons that the House of Delegates of the American Medical Association at its meeting in New York City just a week ago voiced its strong and unanimous opposition to the provisions of this legislation which would amend the Food, Drug and Cosmetic Act to authorize the Food and Drug Administration to determine the efficacy, as well as safety, of a prescription drug prior to the approval of the New Drug Application.

The report of the Board of Trustees, which was approved by the House of Delegates stated, in part: "This position is based on the conviction that a decision with respect to the effectiveness of drugs is dependent upon extended research, experimentation and usage. The medical knowledge which is necessary for a continuing opinion on the effectiveness of drugs would not be available to the Food and Drug Administration in arriving at a decision as to the effectiveness of a new drug if such decision had to be made at the time of the introduction and only on the basis of limited clinical testing. An important inherent danger in the unilateral determination of efficacy by government is the prevention of the manufacture and marketing of a drug, the efficacy of which might later be determined to be significant.

"The vesting of the authority suggested by this legislation in the Food and Drug Administration would operatc to limit research, the marketing of drugs and the exercise of discretion by the medical profession.

"The marketing of a relatively useless drug is infinitely less serious than would be arbitrary exclusion from the market of a drug that might have been life saving for many persons."

Medicine is both a science and an art. Many of medicine's greatest discoveries have been made only after extensive clinical experience with a great number of physicians treating a great number of patients. As applied to drugs, we do not believe that a governmental authority, or any other authority, can act as an arbiter in deciding before hand which drugs are going to be effective in a particular situation. Nor can it decide which drugs, with apparently little efficacy for a prescribed condition, will be found from experience to be higly valuable in the treatment of another, possibly totally unrelated, disease.

It is this aspect of medicine that leads the American Medical Association to oppose those sections of S. 1552 which would grant to the Food and Drug Administration the authority to determine, evaluate and pass on a drug's efficacy and thus determine beforehand that a drug should not be marketed.

J. H. Summers, M.D.

President's Message

Few component societies meet during the summer months but most of them begin regular meetings in September. While the basic reason for the society meeting is to receive postgraduate education, the need is now evident for expanded programs dealing with the problems facing the medical profession.

It is quite evident that many individual physicians have become alert to the need of informing themselves and their patients of the situation medicine faces today and many have taken an active part in promoting good legislation and opposing bad.

With closing of this session of Congress, the pressure will be relieved. But it will be only temporary—only until the Congress convenes again.

The county society meeting can be the means of maintaining this interest and in interesting other physicians to become active, and in societies as such in planning programs in their communities that will help when legislation detrimental to good medical practice again comes up.

By no means should good scientific programs be sacrificed, but neither should the need for constant reminders concerning medical problems be overlooked.

J. H. Summers, M.D.

EDITORIALS

COMMUNICATION

Some years ago a statesman said that the country which developed the best communication would become the strongest country of the world. The importance of communication becomes increasingly outstanding.

Also, some years ago, deeds stood by themselves and word of mouth made both good and bad deeds known. Why this situation has changed has brought forth many explanations from many people—the pace of the present day world, the tensions that exist, TV taking the place of conversation are but a few.

Regardless of the cause, it is quite evident in all phases of enterprise today there must be communication. It is also evident that there is increasing communication, in advertising, in the growth of public relations work, in the amount of literature on every conceivable subject.

It is quite understandable that medicine has not taken easily to communication. The very nature of the practice of medicine is based on receiving information—begun in the medical school and continued through reading and postgraduate courses. The question always asked on "What's My Line" when the occupation deals with a service, "Do people come to you for your services" never applies to anyone in sales or promotion work; so again doctors through the years have not become alert to the present trend of communication—or advertising of their work and services.

Constant pressure in recent years for the socialization of medicine has made the long time attitude of the medical profession untenable and more and more physicians are becoming well aware of the need for communicating to the public the superiority of the present method of caring for the health of the people. Each physician, in his own mind, feels this strongly, and understands why it is true. But today, that is not sufficient. The public must be made aware of it.

While it seems improbable that the present threat to medical practice will be passed in this session of Congress, it cannot be doubted that the next Congress will consider similar legislation.

Most state medical associations, as well as the American Medical Association, are doing a great deal of work directed toward informing the general public concerning the work of the medical profession and the advisability of medicine continuing as a private enterprise.

However, the most important work that can be done in acquainting people with the facts, so well known to the physician himself, is in the local community, the "grass roots."

The requests for pamphlets for distribution to patients which followed a recent letter from the Missouri State Medical Association office was most gratifying. Also the specific programs being carried out—and the public informed on—by several societies in the state are certain to have their effect when further legislation comes before the Congress.

If every doctor in the state would see that his patients are informed, if all societies had programs in effect that showed that the profession is doing the best job possible for the care of the people, there would not be the strength of political pressure as there is today. Their communication would not be as good as that of the medical profession.

FREE MEDICAL CARE

Free medical care came up for discussion in an informal meeting of several physicians recently and when one was asked how much free medical care he gave, he named a couple of clinics, then added something else, and then said "Really, I have no idea. I would have to keep a record for a while—and no more paper work."

However, some figures were given recently on a survey conducted by *New Medical Materia.* It stated that the total amount of free medical care in 48 states and the District of Columbia during 1960 amounted to $657,535,000, or an average of $3.71 for each citizen.

A figure of $13,735,000 was given for the cost of free medical care provided by Missouri physicians in 1960. The figures given for neighboring states to Missouri are: Illinois, $37,745,000; Iowa, $7,422,000; Kansas, $6,353,000; Arkansas, $5,369,000; Oklahoma, $7,393,000.

The figures given compared the amounts with 1955 and showed an increase of 10.6 per cent.

Treatment of private patients without charge made up the greatest portion of the typical physician's free services. Unpaid hospital ward service accounted for as high as 41.9 per cent in one state.

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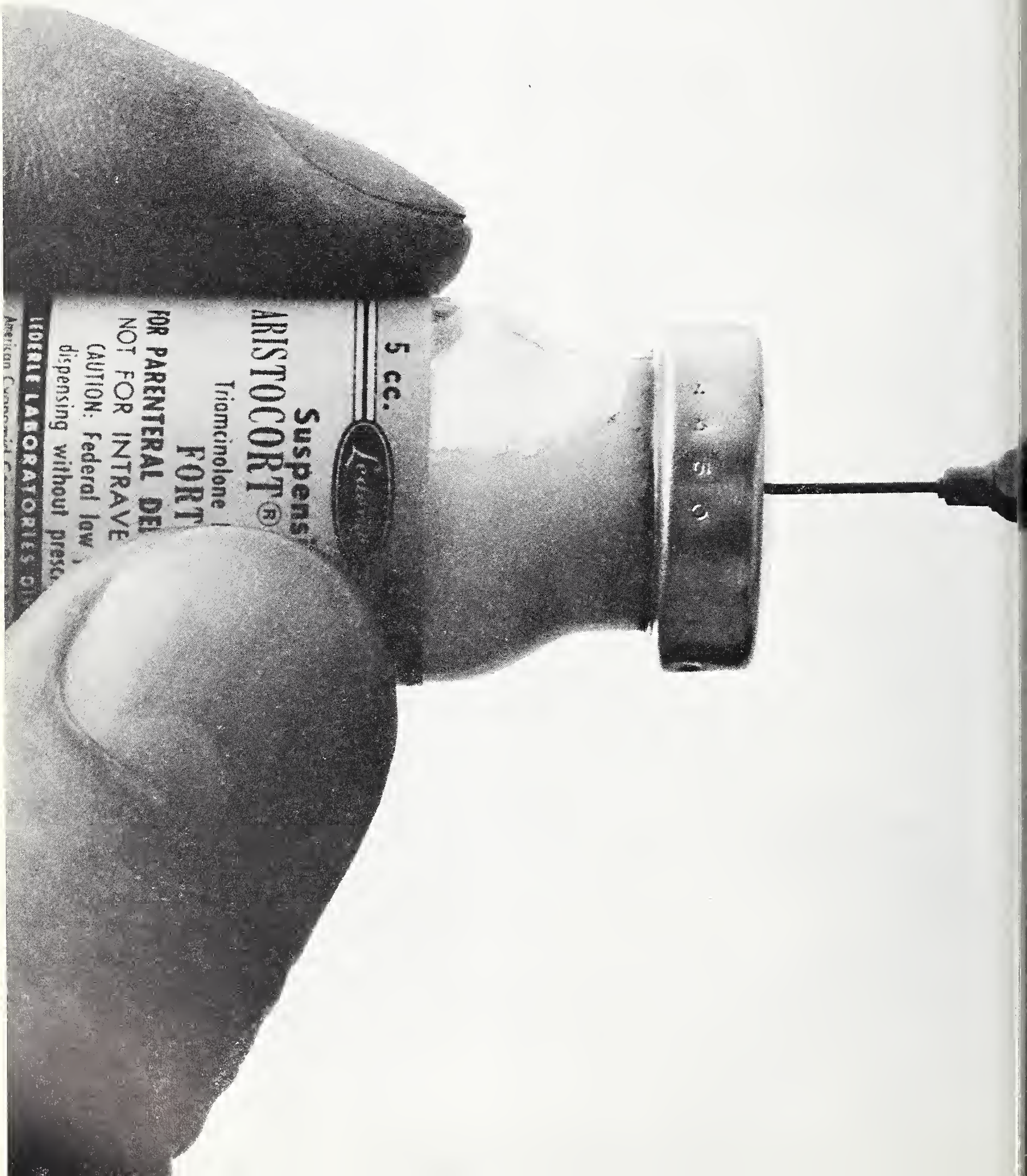
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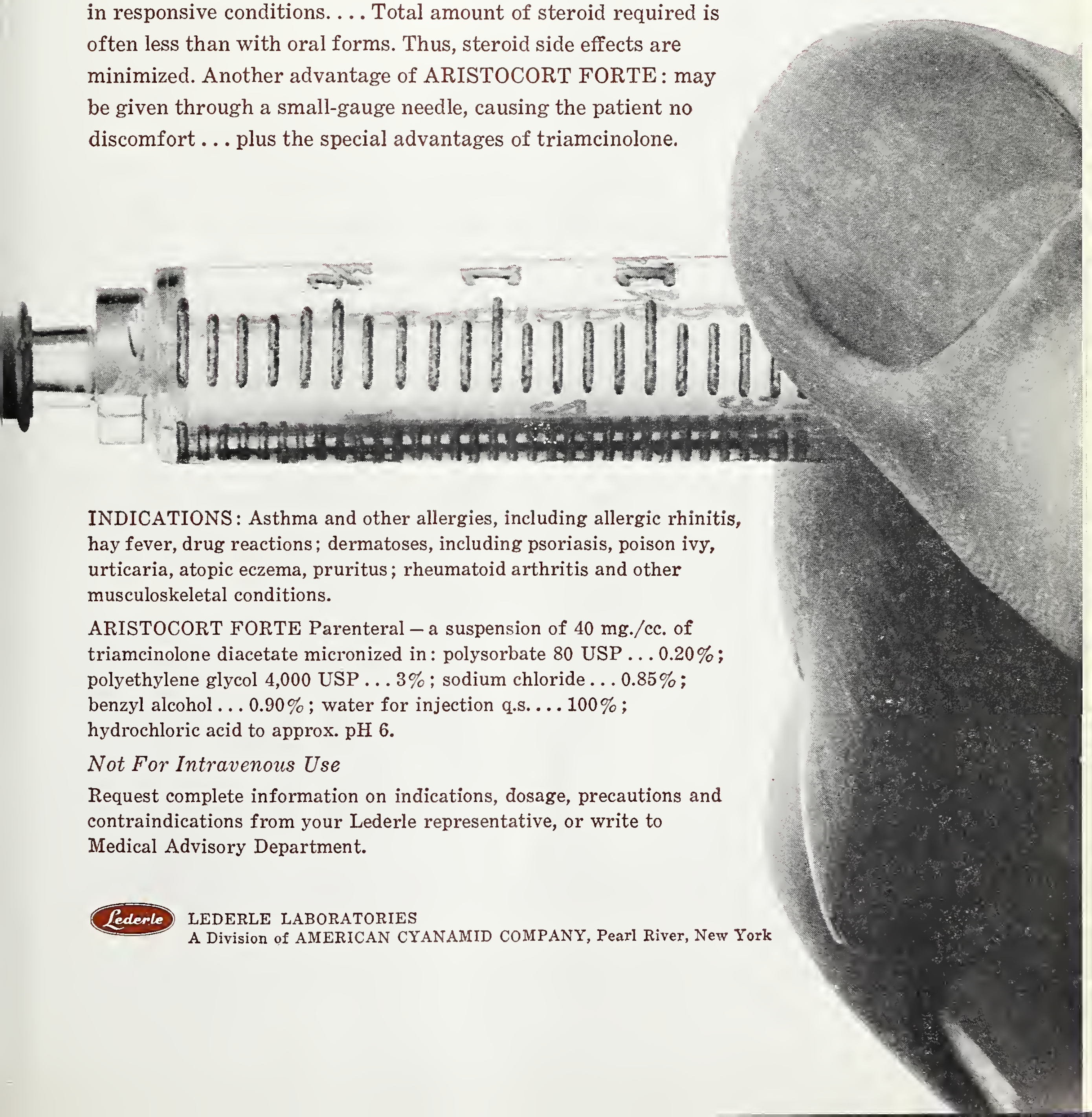
Single I.M. doses of ARISTOCORT FORTE 4 to 7 times the usual daily oral dose can control symptoms 4 to 7 days, or even longer—sometimes up to 4 weeks in responsive conditions. . . . Total amount of steroid required is often less than with oral forms. Thus, steroid side effects are minimized. Another advantage of ARISTOCORT FORTE: may be given through a small-gauge needle, causing the patient no discomfort . . . plus the special advantages of triamcinolone.



INDICATIONS: Asthma and other allergies, including allergic rhinitis, hay fever, drug reactions; dermatoses, including psoriasis, poison ivy, urticaria, atopic eczema, pruritus; rheumatoid arthritis and other musculoskeletal conditions.

ARISTOCORT FORTE Parenteral — a suspension of 40 mg./cc. of triamcinolone diacetate micronized in: polysorbate 80 USP . . . 0.20%; polyethylene glycol 4,000 USP . . . 3%; sodium chloride . . . 0.85%; benzyl alcohol . . . 0.90%; water for injection q.s. . . . 100%; hydrochloric acid to approx. pH 6.

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Ramblings of the Field Secretary

A dedication program for the new community medical center at Clarksville, Mo., was held on Sunday, July 22. This three unit medical center, furnishing offices for a dentist and two physicians, was made possible through Southern Pike County Community Progress, Inc., with the assistance of Sears-Roebuck Foundation and the Pike County Medical Society. The funds for the construction of the medical center came from the stockholders who make up Southern Pike Community Progress, Inc.

Approximately a year ago when construction began on this medical office setup, the town had no M.D. or dentist. Now they have a new doctor and a new dentist. Edward J. Jackson, M.D., a graduate of Washington University Medical School in St. Louis, who served his internship in Philadelphia, has begun medical practice in the new medical center. Robert C. Gardaphe, D.D.S., a native of Chicago, who attended the School of Dentistry at St. Louis University, occupies the dental suite in the new medical center. Here is an example of a community which wanted something badly enough to get together and through planning, sacrifice and hard work, have gained their objective.

The Chairman and spark plug of the Board of Directors of the Southern Pike Community Progress, Inc., is Milton F. Duval, a businessman in Clarksville, formally a State Representative from Pike County. Featured speakers at the dedication service on July 22 were U. S. Senator Edward Long and State Attorney General Thomas Eagleton.

Other communities seeking physicians have learned of the success of the Clarksville venture as well as those of Illmo and Pattonsburg, who have accomplished similar feats. Monday night, July 31, I was invited to address an open meeting in my "old home town," Oregon, on ways and means of getting a resident M.D. to locate there. It was quite a stimulating and satisfying experience to have this opportunity to discuss this important project with a good number of old friends. It is refreshing these days to observe towns like Oregon, those mentioned and others, having a need, meeting this need through local efforts. Maybe there is still a lot of the old frontier spirit with us merely needing the right stimulus.

I note that the Missouri Heart Association has some research fellowships and grants-in-aid available with applications to be submitted on or before November 1, 1961. The research fellowships are designed for those with previous scientific training which qualify for research in the cardiovascular field. Grants-in-aid are made to nonprofit institutions with basic facilities and qualified personnel to be used in specific programs of investigation in the field of cardiovascular functions and diseases. Further information may be secured from the Missouri Heart Association, Columbia, Missouri.

The Association of American Physicians and Surgeons Freedom Programs—1961 Annual Essay Contest which was judged in Chicago on May 8, 1961, awarded certifieates of meritorious achievement to Miss Lynn Waggoner, Sullivan High School, Sullivan, and Miss Mary Robins, Hillcrest Senior High School, Springfield. Missouri high school students have consistently rated well in this annual essay contest of the AAPS.

A number of formal PG programs over Missouri are already scheduled for early fall. These include: a two day interprofessional seminar at the University of Missouri Medical School, September 18-19, to study the various aspects of rabies, leptospirosis and histoplasmosis; 39th Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society in Kansas City, September 18-19-20; the Second Annual M.D. Day program at the University of Missouri, October 27-28, and the 13th Annual Scientific Assembly of the Missouri Academy of General Practice in Kansas City, November 4-5.

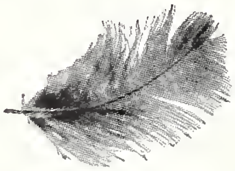
WASHINGTON

(Continued from page 910)

Now on Record

The testimony of the 80 individuals and groups opposing H. R. 4222 and the 63 individuals and organizations backing the measure are now a part of the Congressional Record. The AMA Council on Legislative Activities says that those who attended the hearings were of the opinion that the medical profession and its allies did an excellent job in presenting their data, opinions and reasons for opposing H. R. 4222 and that it will be a record which Congressmen can cite when opposing the measure.

It takes so little to trigger an asthmatic attack...



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"Superiority of [MARAX] seems attributable to the inclusion in it of hydroxyzine in place of the conventional barbiturates."[2] In a series of patients generally refractory to the usual antiasthmatics, and who required steroids in order to obtain temporary relief, 70% showed good to excellent symptomatic relief with MARAX. Patients "...slept more comfortably and breathed more easily. The characteristic asthma wheeze was either markedly reduced or entirely relieved."[3]

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References: 1. Santos, I. M. H., and Unger, L.: Ann. Allergy 18:172 (Feb.) 1960. 2. Charlton, J. D.: Ann. Allergy, in press. 3. Shaftel, H. E.: Clin. Med. 7:1841 (Sept.) 1960.

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News—Personal and Professional

The American Urological Association has elected **Grayson Carroll**, M.D., St. Louis, president-elect.

Installed as president of the Boonville Lions Club at a dinner dance meeting on June 29 was **Byron M. Stuart**, M.D., Boonville.

Featured speaker at a June meeting of the Clayton Sertoma Club was **Addison Duval**, M.D., Jefferson City.

Taking part in a three day workshop preceding the meeting of the American Rhinologic Society in Chicago on October 7 will be **Daniel D. Klaff**, M.D., St. Louis.

Named supervisor of a newly created position in field professional relations of the St. Louis Blue Shield plan is Mr. William J. Brennan, St. Louis. Mr. Brennan has been a professional relations representative of the plan since 1957.

Three-cornered identification badges were issued to all "Dr. Blacklock babies" at a celebration held in honor of **David E. Blacklock**, M.D., King City, during the summer.

Trustees of the Independence Sanitarium and Hospital honored **Charles H. Allen**, M.D., **John R. Green**, M.D., and **Stanley L. Green**, M.D., at a luncheon and presented them with resolutions thanking them for their long years of service.

"The Adolescent Patient" will be the subject of a program to be presented October 29 at 2:30 p.m. at Neurological Hospital, Kansas City.

Principal speaker at the annual meeting of the Cerebral Palsy Association on June 30 was **George J. Lytton**, M.D., Kansas City.

The Independence Rotary Club recently installed **Wallace R. Stacy**, M.D., Independence, as president.

Kansas City Council 527 of the Knights of Columbus has elected **Carl D. Enna**, M.D., Kansas City, as president.

The Radiological Society of North America has elected **John W. Walker**, M.D., Kansas City, to its board of directors.

The Greater Kansas City chapter of the Myasthenia Gravis Foundation has named a medical advisory board composed of Drs. **Richard Helman, Edward G. Kettner, John H. Mayer, Jr., Oscar Pinkster, Ellsworth H. Trowbridge, Jr.,** and **William Q. Wu**, all of Kansas City.

Several clinics were conducted and a series of lectures presented at the Maternite Chancercelles in Port-au-Prince recently by **E. Lee Dorsett**, M.D., St. Louis.

The American Association of Industrial Nurses recently appointed **William L. Macon**, M.D., St. Louis, a member of their medical advisory council.

NEW MEMBERS

Erwin E. Busiek, M.D., Professional Building, Springfield, has become a member of the Greene County Medical Society. Dr. Busiek is a native of Missouri, received his preliminary education in Kansas, and his M.D. degree from Vanderbilt University School of Medicine in 1955.

Timothy T. Dalton, M.D., 701 East 63rd St., Kansas City 10, has become a member of the Jackson County Medical Society. Dr. Dalton is a native of Missouri, received his preliminary education in Illinois, and his M.D. degree from Creighton University in 1955.

Dallas B. Fouts, Sr., M.D., 10901 Winner Road, Independence, has become a member of the Jackson County Medical Society. Dr. Fouts is a native of Indiana, received his preliminary education in Indiana, and his M.D. degree from Indiana School of Medicine in 1954.

Frank C. Giddings, M.D., Burge Protestant Hospital, Springfield, has become a member of

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ORGANIC DISEASE
COMPLAINS OF chronic constipation,
flatulence, belching,
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the Greene County Medical Society. Dr. Giddings is a native of Nebraska, received his preliminary education in Colorado, and his M.D. degree from University of Nebraska in 1954.

Harold D. Harvey, M.D., 1531 East Sunshine St., Springfield, has become a member of the Greene County Medical Society. Dr. Harvey is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from University of Maryland in 1954.

Daniel E. Holmes, M.D., 600 South Glenstone St., Springfield, has become a member of the Greene County Medical Society. Dr. Holmes is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University in 1955.

Elmer C. Jackson, M.D., State Hospital 1, Fulton, has become a member of the Callaway County Medical Society. Dr. Jackson is a native of Oklahoma, received his preliminary education in Oklahoma, and his M.D. degree from University of Colorado in 1954.

Louis E. Jorel, M.D., 1636 South Glenstone St., Springfield, has become a member of the Greene County Medical Society. Dr. Jorel is a native of New Jersey, received his preliminary education in Virginia, and his M.D. degree from University of Virginia in 1953.

Joseph J. Lauber, M.D., 1580 Hollywood Lane, Florissant, has become a member of the St. Louis County Medical Society. Dr. Lauber is a native of Indiana, received his preliminary education in Indiana, and his M.D. degree from St. Louis University in 1955.

Ivan E. Lloyd, M.D., 110 E. Alton St., Independence, has become a member of the Jackson County Medical Society. Dr. Lloyd is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from University of Kansas in 1955.

Andrew McCanse, M.D., 4706 Broadway, Kansas City 12, has become a member of the Jackson County Medical Society. Dr. McCanse is a native of New York, received his preliminary education in Missouri, and his M.D. degree from Washington University in 1954.

Charles B. Powell, M.D., 390 W. St. Anthony St., Florissant, has become a member of the St. Louis County Medical Society. Dr. Powell is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from University of Kansas in 1950.

Joseph P. Russell, M.D., State Office Building, Jefferson City, has become a member of the Cole County Medical Society. Dr. Russell received his M.D. degree from St. Louis University in 1930.

Harwood N. Sturtevant, M.D., Professional Building, Springfield, has become a member of the Greene County Medical Society. Dr. Sturtevant is a native of Illinois, received his preliminary education in Colorado and Virginia, and his M.D. degree from St. Louis University in 1954.

J. R. Weber, M.D., 135 W. Adams St., St. Louis 22, has become a member of the St. Louis County Medical Society. Dr. Weber is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University in 1954.

DEATHS

Jones, Edward E., M.D., Lilbourn, a graduate of American Medical College, 1906; member of Semo County Medical Society; aged 82; died July 9.

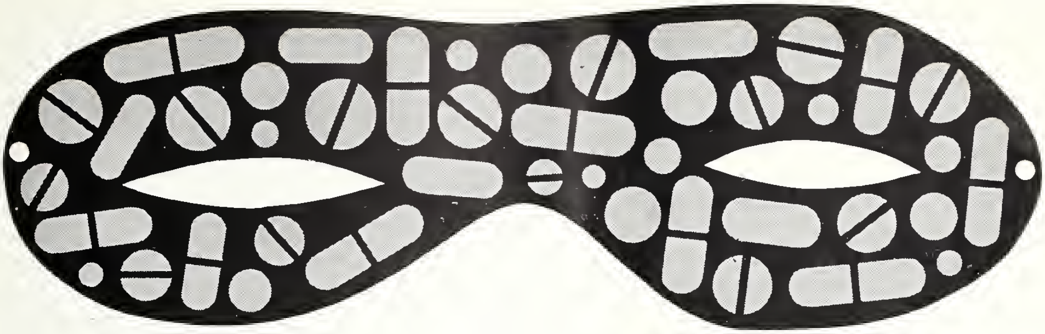
McNearney, Joseph A., M.D., 7308 Glades St., St. Louis, a graduate of St. Louis University, 1913; member of St. Louis County Medical Society; aged 71; died July 12.

Shepherd, Charles T., M.D., 10 Covington Meadows, St. Louis, a graduate of St. Louis University, 1906; member of St. Louis County Medical Society; aged 76; died July 19.

Sausville, Albert J., M.D., 8321 North Broadway, St. Louis, a graduate of St. Louis University, 1935; member of St. Louis Medical Society; aged 51; died July 23.

Hall, Robert G., M.D., 4406 McPherson Ave., St. Louis, a graduate of St. Louis University, 1909; member of Callaway County Medical Society; aged 92; died July 26.

Randall, Leslie C., M.D., Licking, a graduate of Barnes Medical College, 1908; member of South Central Counties Medical Society; aged 80; died July 28.



drugs anonymous

One of the several hastily conceived and potentially dangerous suggestions for reducing drug costs is generic-name prescribing. The proponents of generic-name prescribing claim that it will lower drug costs significantly and—through supervision by the Federal Government—provide quality equivalent to that of trademarked drugs. We maintain that these claims are false. Here are some authoritative answers to the principal questions posed by generic-name prescribing.

How much money would be saved if all prescriptions were written for generic-name drugs?

"The [Rhode Island] Division of Public Assistance examined 10,000 drug prescriptions for welfare recipients for the purpose of determining the actual savings . . . of generic versus trade-name drugs. The drugs had cost $28,000. Substituting generic drugs whenever possible would have provided a saving of less than 5 per cent. Syracuse has made a similar study of drug costs with comparable results."

Rhode Island Medical Journal,
January, 1961

Are the savings worth the risk of sacrificing quality?

". . . it is unsafe [to prescribe generically] because there is not sufficient policing of our standards. . . ."

Lloyd C. Miller, Ph. D.
Director of Revision of the U.S.P.

"The naive belief that, if a product was not good, the FDA would prohibit its sale is just not realistic. . . . it is completely impossible for the FDA to check every batch of every product of every manufacturer. . . . Hence the integrity and reputation of the manufacturer assume unusual significance where drugs and health products are concerned."

Albert H. Holland, M.D.
formerly Medical Director of the
Food and Drug Administration

Smith Kline & French Laboratories, Philadelphia SK&F

County Society News

EIGHTH DISTRICT

DOYLE C. McCRAW, BOLIVAR, COUNCILOR

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held Friday, June 23, 1961, at Galli's Half-A-Hill, Springfield, with 62 members and 14 guests present. President Dr. John P. Ferguson presided.

The minutes of the April meeting of the society were approved as published in the *Bulletin*. Dr. F. T. Moseley, Chairman of the Public Policy Committee, announced that his Committee had prepared a special program with the assistance of Professional Management Midwest, for office secretaries for June 29, 1961. Dr. Moseley also reminded the membership of the July 30 Medical Economics Seminar scheduled by the Missouri Academy of General Practice for Arrowhead Lodge at the Lake of the Ozarks.

Dr. Ferguson reminded the members that this will be the last regularly scheduled meeting of the society until September 22, 1961, unless it is necessary to call a special meeting during the summer months.

On behalf of the membership, Dr. Ferguson expressed regret at the news that Dr. James R. Amos has resigned his position as Director of the City-County Health Department to become Director of Health for the State of North Dakota. He expressed the best wishes of the Society to Dr. Amos in his new position.

Having been approved by the committee on Medical Ethics, and the Council, the following applications were presented for vote to the membership: Frank C. Giddings, M.D.; Harold D. Harvey, M.D.; Daniel E. Holmes, M.D.; Louis E. Jorel, M.D.; Erwin F. Busiek, M.D., and Harwood N. Sturtevant, M.D.

Upon motion by Dr. H'Doubler, seconded by Dr. Jameson, these applicants were unanimously approved for membership.

Dr. James T. Brown, Program Chairman, presented Mr. John Carnahan, Mr. Irving Schwab, Mr. Leonard Richardson and Mr. Steve Schneider of the Springfield Estate Planning Council who presented the program which consisted of a panel discussion on "The CPC on Estate Planning."

Following a question and answer period, Dr. Ferguson expressed appreciation to the Estate Planning Council and the panelists for the presentation of the program.

There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., Secretary

EXECUTIVE ASSISTANT APPOINTED

Mr. Thomas P. Fox

Thomas P. Fox began duties as Executive Assistant with the Missouri State Medical Association on July 1. He had been associate administrator of St. Anthony's Hospital, St. Louis, for the last five years.

Mr. Fox is a member of the Missouri Hospital Association board of trustees, is a past president of the St. Louis Hospital Personnel Managers Association and is a member of the board of trustees of St. Louis Blue Cross.

He is 44 years of age, is a graduate of St. Louis University School of Commerce and Finance, is married and has two daughters.

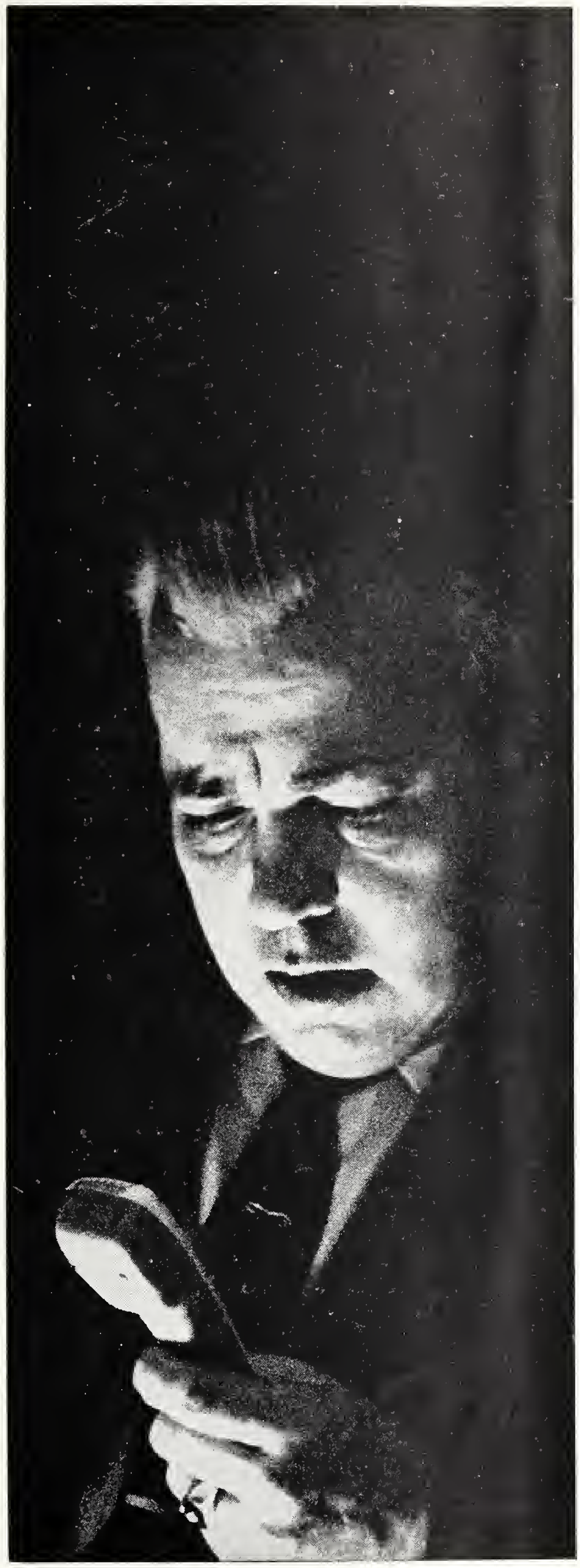
MISSOURI ACADEMY

(Continued from page 914)

plans are already in the making for an even larger, similar, session next year.

As another gentle reminder, please mark your calendar in red for the dates of Saturday and Sunday, November 4-5. On these days we hope to see you at the Muehlebach Hotel in Kansas City, at the 13th Annual Scientific Assembly of the Missouri Academy of General Practice.

Incidentally, you may be interested to know that Dr. Walter T. Gunn, St. Louis, has been appointed by the Board of Directors of the American Academy of General Practice to a three year term on the Commission on Hospitals of the AAGP.



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TOWNS WELCOME DOCTORS TO CLINICS BUILT BY THE COMMUNITIES

Pattonsburg celebrated the opening of a new community built clinic and the arrival of Larry Dowell, M.D., on July 16. On July 22, the Community Medical Center was dedicated at Clarksville and Edward K. Jackson, M.D., and Robert C. Gardaphe, D.D.S., were welcomed.

The opening of the clinic building at Pattonsburg followed two years of planning and working by the Daviess County community. The Sears Roebuck Foundation assisted in planning the clinic and the Lions Club initiated the campaign to obtain funds for the building. A gathering of about 300 persons heard an address at the dedication by Col. Hugh H. Waggoner, superintendent of the state highway patrol, and met Dr. and Mrs. Dowell.

At the dedication ceremonies in Clarksville, the principal speakers were the Honorable Thomas F. Eagleton, Attorney General of the State, and Honorable Edward V. Long, United States Senator. The Sears Roebuck Foundation did the preliminary planning for the clinic building and the Southern Pike Community Progress, Inc., carried out the campaign to build the clinic.

Entrance to the Community Medical Center at Clarksville.

The speakers platform for the Clarksville dedication was placed on the clinic grounds.

DIVISION OF HEALTH

(Continued from page 916)

Hill, Jack H., M.D., Trinity Lutheran Hospital, 31st & Wyandotte Sts., Kansas City 8.

Holman, H. Frank, M.D., Clinical Laboratories, 100 N. Euclid Ave., St. Louis 8.

Johnson, R. E., M.D., Boone County Hospital, Columbia.

Kerr, Russell W., M.D., St. Joseph's Hospital, 5938 Blue Hills Road, Kansas City 3.

Lapi, Angelo, M.D., St. Mary's Hospital, 101 Memorial Dr., Kansas City 8.

Lovinggood, Thomas, M.D., St. Francis Hospital, Cape Girardeau.

*Lucas, Fred V., M.D., University of Missouri, Department of Pathology, Columbia.

McPhee, W. R., M.D., Upsher Laboratories, 909 Argyle Bldg., Kansas City 6.

Milano, Angelo, M.D., Allen Medical Laboratories, 35 N. Central Ave., Clayton 5.

*Neal, M. Pinson, M.D., University of Missouri, Department of Pathology, Columbia.

Ogilvie, Robert W., M.D., St. Luke's Hospital, 5535 Delmar Blvd., St. Louis 12.

Perna, Vincent P., M.D., Clinical Laboratories, 6500 Chippewa St., St. Louis 9.

Platt, William R., M.D., Laboratory of Clinical Pathology, 309 University Club Bldg., St. Louis 3.

Portuondo, B. C., M.D., Alexian Brothers Hospital and St. Anthony's Hospital, St. Louis.

Riddell, Richard V., M.D., St. Joseph's Hospital, St. Joseph.

Roberts, John R., M.D., Clinical Laboratories, 3714 Washington Ave., St. Louis 8.

Schultz, Loraine E., M.D., Professional Laboratory, 909 University Ave., Columbia.

*Tucker, Eugene, M.D., St. Mary's Hospital, 6420 Clayton Road, St. Louis 17.

Yuan, Louis, M.D., Lutheran Hospital, 2639 Miami St., St. Louis 18.

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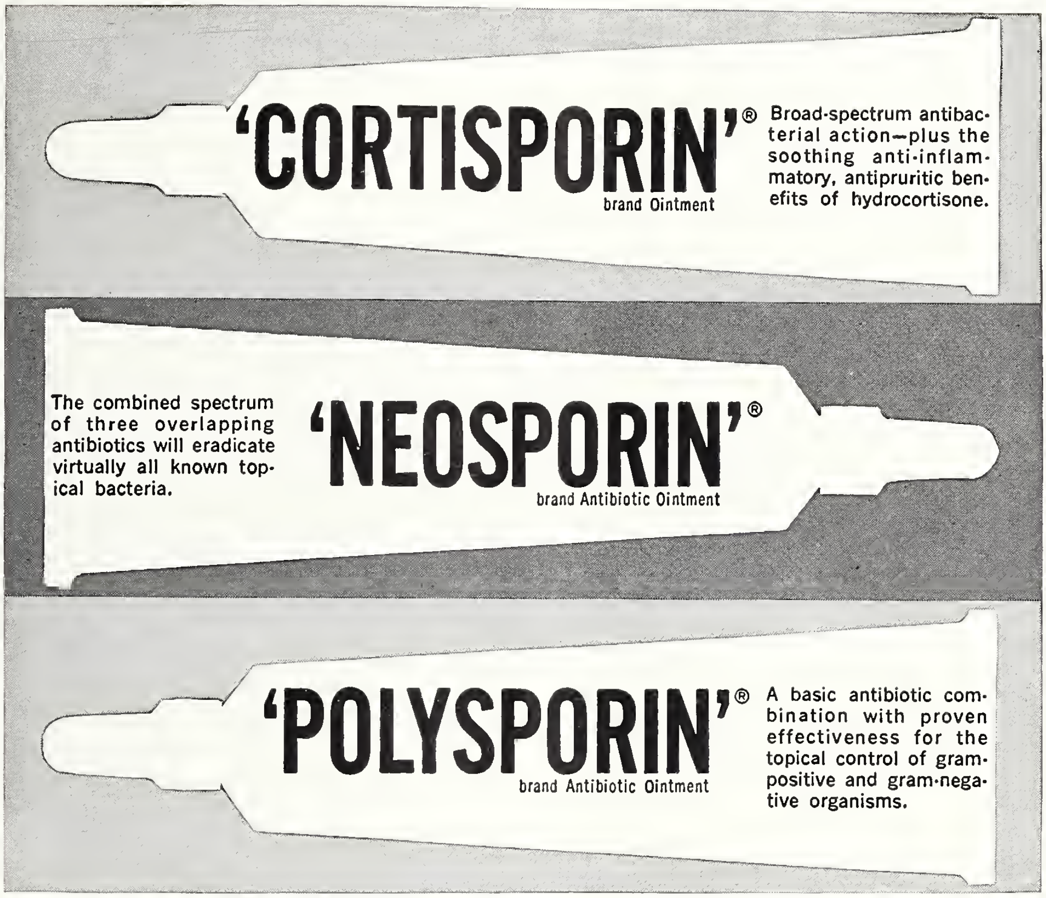

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Zinc Bacitracin	500 Units	400 Units	400 Units
Neomycin Sulfate	—	5 mg.	5 mg.
Hydrocortisone	—	—	10 mg.
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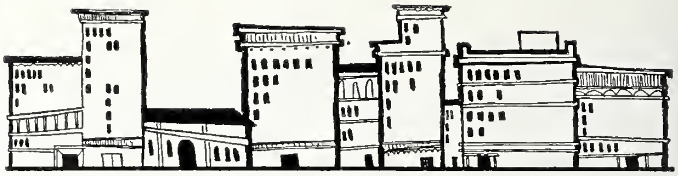
From the Medical Schools



WASHINGTON UNIVERSITY

Meetings

Twenty-one staff members at Washington University School of Medicine are participating in summer scientific conferences in Europe. Attending the Fifth International Congress of Biochemistry in Moscow from the department of biological chemistry were Dr. Robert K. Crane, associate professor; Dr. Carl Friedin and Dr. Ernst Helmreich, both assistant professors. Representing the department of pharmacology were Dr. F. Edmund Hunter, Jr., professor; Dr. Robert M. Burton, assistant professor, and Dr. Leon Prosky, trainee. Dr. Burton reported on "Studies on the Structure and Synthesis of Central Nervous System Glycolipids." Dr. Hunter presented papers on "Mechanism of Ascorbate Lysis of Isolated Mitochondria" and "The Role of Electron Transfer and Phosphorylation in Various Parts of the Electron Transport Chain in Control of Mitochondrial Swelling." Three members of the department of otolaryngology were present at the Seventh International Congress of Otorhinolaryngology in Paris. They were Dr. Theodore E. Walsh, professor and head of the department; Dr. Joseph H. Ogura, professor, and Dr. Malcolm H. Stroud. Dr. William Sleator, Jr. and Dr. Gordon M. Schoelfle, both associate professors of physiology, presented papers at the International Biophysics Congress in Stockholm. Dr. Sleator reported on "Excitation-Contraction Coupling in Mammalian Atrial Muscle." Dr. Schoelfle's paper was "Effects of Metabolic Inhibitors on Sodium Conductance in Single Nerve Fibers." Dr. Michel Ter-Pogossian, professor of radiophysics, reported on "Radioactive Oxygen-15, for the Study of the Kinetics of the Oxygen of Respiration" at the Biophysics meeting. Dr. Ter-Pogossian also discussed "The Physical Aspects of Radiation Therapy of Carcinoma of the Cervix Uteri" at the Congress of Radiologists of Latin Culture held in Villejuif, France. Participants in the First International Pharmacological Meeting in Stockholm were Dr. Helen Tredway Graham, professor emeritus of pharmacology; Dr. Oliver H. Lowry, professor and head of the department; Dr. Hunter and Dr. Burton. Dr. Lowry reported on "Potentialities of Quantitative Histochemistry for the Study of Nervous System Pharmacology." Dr. L. V. Ackerman, professor of pathology and surgical pathology, attended another Swedish meeting, the International Congress on Nomenclature of Ovarian Tumors. Dr. Paul Lacy, Mallinckrodt professor and head of the department of pathology, participated in the International Congress on Diabetes held in Switzerland. Dr. Arthur Hess, assistant professor of anatomy, and Dr. Sarah Luse, associate professor of anatomy and pathology, will attend the International Congress of Neuropathology in Munich in September. Official United States delegate to the Seventh International Congress of Neurology in Rome in September will be Dr. James O'Leary, professor of neurology. Dr. O'Leary is currently president of the American Neurological Association. Also participating in the meeting will be Dr. William S. Coxe, instructor in neurological surgery; Dr. Luse and Dr. Salvatore Mingrino, research fellow in neurological surgery.

Dedication

The new $4,288,000 David P. Wohl, Jr.—Washington University Clinics have been dedicated and are in use. United States Senator Lister Hill of Alabama spoke at the dedication ceremonies. The top four floors of the 12-story building have been equipped for research for the departments of medicine and surgery. Other floors are disignated for specialty clinics for out-patient visits. The clinics also include the Malvern B. Clopton Memorial Amphitheater.

Appointments

Dr. Paul E. Lacy has been appointed Mallinckrodt professor and head of the department of pathology. He succeeds Dr. W. Stanley Hartroft, who has accepted a position as director of the Research Institute of the Hospital for Sick Children and professor of physiology at the University of Toronto, Canada. Dr. Lacy joined the staff in 1956 as a research fellow in the department of anatomy. He was named assistant and associate professor of pathology and in 1959 was appointed assistant dean.

Dr. Thomas Brugger has been named director

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of the Child Psychiatry Clinics and assistant professor of psychiatry. He will have charge of the Child Guidance and Child Evaluation Clinics, units of the William Greenleaf Eliot Division of Child Psychiatry. He has been assistant director of the Child Psychiatry Clinic at Cincinnati General Hospital and instructor in psychiatry.

Dr. Sarah A. Luse, associate professor of anatomy and pathology, has been appointed to the pathology Training Committee of the National Institutes of Health, U. S. Public Health Service. The committee reviews applications for training grants in the field of pathology and provides technical advice to the national Advisory Health Council of the National Institutes of Health.

Grants and Gifts

Fellowships and grants totaling more than $45,000 have been awarded by the St. Louis Heart Association and the American Heart Association. Five grants-in-aid totaling $22,215 were awarded by the St. Louis association. The national association presented $22,825 for three grants. One fellowship for $4,800 came from the local group and two others were awarded by the parent group. The grants went to Dr. M. Remsen Behrer, associate professor of pediatrics, $5,000; Dr. H. Mitchell Perry, assistant professor of medicine, $2,283 and $5,225; Dr. James M. Stokes, assistant professor of surgery, $4,932; Dr. J. Neal Middlekamp, assistant professor of pediatrics, $5,000; Dr. David Goldring, professor of pediatrics, $5,000; Dr. Neal S. Bricker, assistant professor of medicine, $11,000; and Dr. Perry and Dr. Carl Moore, Busch professor and head of the department of internal medicine, jointly, $6,600. Fellowships were awarded to Dr. Lee Shine, fellow in medicine; Dr. Bernard Wortman, research assistant professor of ophthalmology, and Dr. Bricker.

The department of pediatrics received $4,996 from the Fern Waldman Memorial Fund. Dr. Teresa Vietti, assistant professor of pediatrics, will direct the research project for the fund in leukemia research. This year's gift will be used to purchase a microscope. More than $57,000 has been donated to the fund in the last 15 years.

Another gift specified for leukemia research was presented to Dr. Carl V. Moore, head of the department of internal medicine. The gift of $310 initiated the Muriel Zweig Leukemia Fund. The money was raised by close friends of Mrs. Zweig, who died last year of the disease.

Ninety-six students were awarded summer fellowships for research totaling $57,600. The fellowship program was supported by departmental training grants and grants from the U. S. Public Health Service, Lederle Laboratories and the Tobacco Industry Research Committee. Awards were made on the merit of projects originated by the students and submitted to a faculty committee for consideration.

ST. LOUIS UNIVERSITY

Radiation Course

"Epidemiology of Radiation Injury" was the subject of a two week summer postgraduate course featuring 22 nuclear medical authorities at Firmin Desloge Hospital of St. Louis University August 7 to 18.

Personnel associated with radiation health research attended the course, which was sponsored for the first time by the Section of Nuclear Medicine of the St. Louis University School of Medicine. A four week course on "Medical Aspects of Radiological Health" for public health officials ended August 4.

In commenting on the second course, Dr. George E. Thoma, Jr., head of the section of nuclear medicine at the School of Medicine, said it covered "the occupation, environmental and accidental problems of radiation exposure."

"The use of ionizing radiation is rapidly increasing in medical, academic, industrial and military fields. Research in radiological health and the epidemiology of radiation injury requires a specialized background of present knowledge of the sources and effects of radiation," Dr. Thoma said.

Dr. Thoma also named as important "a knowledge of biostatistics necessary for appreciation of the significance of present data relating to radiation injury."

Visiting scientists, who combined lectures with St. Louis University School of Medicine faculty, were: Dr. Herbert C. Batson, Department of Public Health, State of Illinois; Dr. Charles M. Pomerat, Pasadena Foundation for Medical Research; Dr. George B. Hutehason, School of Public Health, Harvard University; Dr. George W. Casarett, Atomic Energy Project, University of Rochester School of Medicine and Dentistry; Dr. E. B. Lewis, Department of Biology, California Institute of Technology; Dr. H. D. Bruner, Division of Biology and Medicine, United States Atomic Energy Commission; Dr. Sydney F. Thomas, Palo Alto, Calif., Clinic; Dr. Eugene L. Saenger, Department of Radiology, University of Cincinnati; Mr. James Pifer, University of

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Rochester School of Medicine and Dentistry; Dr. Edward Toyooka, Division of Radiological Health, U. S. Public Health Service; Dr. Theodore D. Sterling, Department of Preventive Medicine; Dr. Robert D. Platt, Department of Biology, Emory University; Dr. Shields Warren, Cancer Research Center, New England Deaconess Hospital; Dr. John T. Gentry, New York State Department of Health, Syracuse, N. Y.; Mr. Henry J. Lucas, Jr., Radiation Physics Division, Argonne National Laboratory, Lemont, Ill.; Dr. Robert J. Hasterlik, University of Chicago Argonne Cancer Hospital; Dr. Victor E. Archer, Occupational Health Field Station, U. S. Public Health Service; Dr. Philip E. Sartwell, Johns Hopkins University School of Hygiene and Public Health; Dr. Robert Glass, Department of Public Health Dentistry, Tufts University School of Dentistry; Dr. Neil Wald, Graduate School of Public Health, University of Pittsburgh; Dr. E. Bertrum Brill, Division of Radiological Health, Johns Hopkins University, and Dr. Robert Heyssel, Department of Medicine, Vanderbilt University School of Medicine.

The course which was designed to better acquaint individuals concerned with radiation health research with present knowledge in the field of radiation epidemiology for their future work, covered a review of biostatistics, survey of somatic and general effects of radiation and epidemiologic studies of radiation exposures.

Sessions met in Miller Hall, Firmin Desloge Hospital, 1325 S. Grand Blvd.

The 21 nuclear medicine authorities who lectured at the earlier postgraduate summer course were: Dr. Francis J. Weber, Chief, Division of Radiological Health, U. S. Public Health Service; Mr. James G. Terrill, Asst. Chief, Division of Radiological Health, U. S. Public Health Service; Dr. Russell Morgan, Radiologist-in-Chief, the Johns Hopkins Hospital, Baltimore; Dr. Victor P. Bond, Chief, Pathology Section, Brookhaven National Laboratory, Upton, Long Island, New York; Mr. John Auxier, Research Physicist, Health Physics Division, Oak Ridge National Laboratory; Dr. Walter S. Snyder, Associate Director, Health Physics Division, Oak Ridge National Laboratory; Dr. Conrad P. Straub, Chief, Radiological Health Research Activities, Taft Sanitary Engineering Center, Cincinnati; Dr. Robert B. Platt, professor of biology, Emory University, Atlanta; Dr. Niel Wald, Research Professor of Radiation Health, University of Pittsburgh; Dr. Eugene L. Saenger, Director, Radioisotope Laboratory, University of Cincinnati; Col. John E. Pickering, Director of Research, Aerospace Medical Center, Brooks Air Force Base, Texas; Mr. Samuel D. Estep, Professor of Law, University of Michigan, Ann Arbor; Mr. James R. Mason, Chief, Isotopes Branch, U. S. Atomic Energy Commission, Germantown, Maryland; Dr. Nathan R. Woodruff, Director, Office of Health and Safety, U. S. Atomic Energy Commission; Dr. George Crocker, Chief, Dental Branch, Division of Radiological Health; Dr. Samuel Ingraham, Chief, Training Branch, Division of Radiological Health; Dr. Russell I. Pierce, Chief, Programs Operation Branch, Division of Radiological Health; Dr. J. Earl Smith, Health Commissioner, St. Louis County; Dr. W. R. Konneker, Member of Missouri Atomic Energy Commission and Dr. Henry M. Hardwicke, Acting Director of State Division of Health.

Summer Research Awards

Stipends totalling approximately $15,500 supported the 12 week research investigations of 26 St. Louis University medical students from nine states and one foreign country. These awards enable the students to engage in a wide range of specialized studies at the School of Medicine, it was announced by Dr. James W. Colbert, Jr., Dean of the School.

A majority of the research stipends are utilized during the summer months from June 1 through August 31. The student research program is under the direction of Dr. Dermott Smith, assistant dean and chairman of the Committee on Student Research.

Sources of research funds and amounts granted to the School of Medicine are as follows: Lederle Laboratories Division, $1,200; National Science Foundation, $2,400; Tobacco Industry, $500; United States Public Health Service, $10,800, and the Women's Advertising Club of St. Louis, $600.

Six of the 16 recipients of $600 stipends from the United States Public Health Service are from the St. Louis area. They are: Jean Ahillen, a senior, daughter of Mr. and Mrs. William Ahillen, 2324 Texas St., St. Louis; Donald Henson, a senior, son of Mrs. E. Henson, 435 Thomas Ave., Ferguson; Stephan S. Morgan, a sophomore, son of Mr. and Mrs. J. L. Morgan, 8 Hawthorne Ct., Kirkwood; Gerald J. Fivian, a sophomore, son of Mr. Theodore W. Fivian, Sr., 2439 Netherwood Dr., St. Louis; Eugene R. Adelmann, a sophomore, son of Mr. and Mrs. R. H. Adelmann, 511 Elizabeth Dr., Webster Groves, and John W.

Thomas, a sophomore, son of Mr. and Mrs. Raymond Thomas, 3945 DeTonty St., St. Louis 4.

Other stipend winners were Joseph B. McNally, Prescott, Arizona; John A. Darpel, Jr., Covington, Kentucky; Philip Dugan, Rosemead, California; Thomas R. Farrell, Ottawa, Illinois; Robert Schichtel, Whittier, California; John Neff, Akron, Ohio; Nick J. Mansour, Superior, Arizona; Merle Gibson, Dayton, Ohio; Gerald Marshall, Tucson, Arizona; James A. Monteleone, Chicago Heights, Illinois; William E. Robertson, Spokane, Washington; John Morris, Piedmont, California; David Baer, Los Angeles, California; James Bacon, Springfield, Missouri; Paul Crary, Ft. Thomas, Kentucky; John Cichon, Detroit, Michigan; Edgar Ho, Kaneohe, Hawaii; Charles Hoppel, Selah, Washington; Kenneth Cavanaugh, Steubenville, Ohio, and Young Chin Chung, Seoul, Korea.

The students were selected by the medical faculty on the basis of academic record and aptitude for research investigation. The stipend award winners, who are in their sophomore, junior and senior years of study, are engaged in preclinical investigations involving the basic science departments within the School of Medicine as well as in the area of clinical experimental medicine. The majority of the research stipends were for $600.

The projects are under the direction of the medical faculty in the departments of anatomy, biochemistry, internal medicine, pathology, physiology, psychiatry and surgery. They involve investigations of the effects of tumors in tissue, evaluation of emotionally disturbed children, cholesterol, metabolism of radioactive bile acids, coronary circulation, virus studies and many other subjects.

Three members of the department of microbiology at the St. Louis University School of Medicine are performing summer research at other laboratories. They are Dr. Norman E. Melechen, assistant professor of microbiology, Cold Spring Harbor, Long Island Biological Laboratories; Dr. Maurice Green, associate professor of microbiology, at University of Wisconsin, department of biochemistry, and Miss Martha Sheik, graduate student, at the Woodshole Laboratories, Woodshole, Mass.

Meetings

Dr. Philip A. Katzman, professor of biochemistry, and Dr. Harold L. Segal, associate professor of pharmacology, attended the Fifth International Congress of Biochemistry in Moscow.

Dr. Alfred W. Richardson, professor of physiology, Dr. Theodore Cooper, assistant professor of surgery, and Teresa Pinakatt, graduate student in physiology, attended the Fourth International Conference on Medical Electronics combined with the Fourteenth Annual Conference on Electrical Techniques in Medicine and Biology in New York July 16 to 21. Drs. Richardson and Cooper presented a paper entitled "The Use of the Thermal Dilution Principle for the Measurement of Cardiac Output in the Rat."

UNIVERSITY OF MISSOURI

Meetings

The second annual M.D. Day program for Missouri physicians will be held at University Medical Center Oct. 27-28. Program participants will include visiting faculty members from the University of Nebraska School of Medicine and members of the Medical Center staff.

A series of discussions will be held on Friday and a clinical pathological conference is scheduled for Saturday morning. Physicians and their wives will be guests of the Medical Center for a buffet luncheon on Saturday, ending the two-day program. Dr. Charles H. Koelling, executive director of Postgraduate Medical Education, is in charge of arrangements.

An Inter-Professional Seminar, jointly sponsored by the University of Missouri School of Medicine, the School of Veterinary Medicine, and the Missouri Division of Health will be conducted at University Medical Center Sept. 18-19. The program will be concerned with the laboratory, animal and human aspects of rabies, leptospirosis and histoplasmosis.

Guest speakers for the seminar will include: Stanley L. Hendricks, D.V.M., public health veterinarian, Iowa State Department of Health, Des Moines; Howard W. Larch, Ph.D., professor, plant science, University of Oklahoma; Fred J. McCrumb, M.D., director of the section on infectious diseases, University of Maryland School of Medicine; Robert W. Menges, D.V.M., senior veterinarian, Communicable Disease Center, Kansas City; Franklin B. Peck, M.D., clinical research division, Lilly Research Laboratories, Indianapolis General Hospital; A. H. Quinn, D.V.M., consulting veterinarian, Jensen-Salsbery Laboratories, Kansas City; James H. Steele, D.V.M., chief of veterinary public health, Communicable Disease Center, Atlanta; Ernest S. Tierkel, D.V.M., chief of the rabies control activity, Communicable Disease Center, Atlanta;

J. Lewis Yates, M.D., chief of medicine, Missouri State Sanatorium, Mt. Vernon; Fred Tosh, M.D., assistant to the chief, Kansas City Field Station, Communicable Disease Center, Kansas City; Irma C. Adams, director of laboratories, Missouri Division of Health, Jefferson City.

Participating members of the Medical Center staff will be: Vernon E. Wilson, M.D., dean and director; Frank B. Engley, Jr., Ph.D., professor and chairman of the department of microbiology; and Herbert S. Goldberg, Ph.D., associate professor of microbiology. Faculty members from the School of Veterinary Medicine who will participate in the program include: Holland A. Groth, D.V.M., dean; Donald C. Blenden, D.V.M., assistant professor of veterinary bacteriology and parasitology; and Arthur A. Case, D.V.M., professor of veterinary medicine and surgery.

Sabbaticals

Three members of the faculty of the School of Medicine at the University of Missouri have been granted sabbatical leaves for the academic year 1961-62.

Dr. Thomas D. Luckey has received a grant from the Commonwealth Fund for study and travel and will spend the next 12 months in Europe. Approximately nine months of that period will be spent in research on antibiotics in the laboratories of Dr. Marcel Florkin at the University of Leige, Belgium. During the remainder of the leave Dr. Luckey will study and discuss new research technics with the staffs of laboratories in England, Italy, Sweden, Norway, Denmark, Holland, France and Germany. His itinerary includes visits to the Carolinski Institute in Stockholm, the University of Denmark, the Zoological Station in Naples, the College of France, the National Institute of Medical Research in London, the National Institute of Dairy Research, the University of London, the Low Temperature Station at Cambridge, and the University of Bergen, Norway.

Dr. Milton D. Overholser, professor on anatomy and chairman of the department, will spend the coming academic year as visiting professor of anatomy at the University of Damascus in Syria under the sponsorship and with the support of the American Friends of the Middle East, Inc. He is believed to be the first American medical professor to be appointed to teach at the University of Damascus for a full year. Under the appointment he will serve as guest lecturer to

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medical students and resident physicians and will assist in the graduate program in anatomy.

Dr. Arthur W. Merrick, associate professor of physiology, will spend his leave at the University of Colorado Medical Center in Denver. He will be associated in clinical work and experimental research with Dr. David Metcalf, chairman of the division of electroencephalography in the department of psychiatry. Dr. Merrick will be concerned primarily with the investigation of mentally deficient and retarded children and with analyzing the degree of deficiency by use of the electroencephalograph.

Trips and Talks

Dr. Thomas D. Luckey, professor and chairman of the department of biochemistry, presented a paper on "Vitamin Metabolism in Germfree and Dibiotic Animals" at the Fifth International Congress of Biochemistry in Moscow, August 10-16. On September 14 Dr. Luckey will discuss "Antibiotics in Nutrition" at the Seventh International Convention of the International Society for Research on Nutrition and Vital Substances to be held in Aachen, Germany.

Dr. Vernon E. Wilson, dean and director of University Medical Center, spoke on "Resources for Research" at a meeting of the Research Colleagues at the Medical Center July 11. Dr. W. D. Mayer, assistant dean, presented a paper on "Cytologic Aspects of Anti-Body Production" at that meeting.

Dr. John J. Modlin, professor and chairman of the department of surgery, and Dr. James E. Randall, associate professor of physiology and biophysics, attended the fourth annual seminar on medical teaching sponsored by the Association of American Medical Colleges in Chicago June 11-14. Representatives of the faculties of 25 medical schools were in attendance.

Dr. Hugh E. Stephenson, Jr., professor of surgery, was a panelist on the "Management of Cardiac Emergencies" at a program sponsored jointly by the section on Diseases of the Chest of the AMA and the American College of Chest Physicians in New York June 26. Dr. Stephenson was coauthor with Dr. James N. Burkeholder of a paper on "The Obstructive Pattern in Coronary Artery Disease" which Dr. Burkeholder presented to the Society for Vascular Surgery at its June 25 meeting in New York. Dr. Burkeholder is a June graduate of the University of Missouri School of Medicine.

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psychiatry and acting chairman of the department, described the present program and outlined some future plans of the department in a meeting with the Boone County Association for Mental Health July 13. Dr. Weiss has been named to the executive board of the Association.

Dr. David Davis, associate professor of psychiatry, participated in discussions at the symposium on open psychiatric staffs held at Pennsylvania Hospital June 24. Topics discussed included the role of psychiatry wards in general hospitals.

Dr. Frank B. Engley, Jr., professor and chairman of the department of microbiology, spoke on "How to Choose a Disinfectant" at a workshop on cross-infections sponsored by the National Association of Sanitarians in St. Louis July 11-12. The workshop was a part of the Association's annual educational conference.

Dr. D. P. Durand, assistant professor of microbiology, and a group of graduate students from the department visited the Tissue Culture Laboratories of the Anchor Serum Company in St. Joseph on July 13.

William K. Beatty, medical librarian and associate professor of medical bibliography, attended the annual meeting of the Medical Library Association in Seattle May 7-12 and on May 8 presented a full-day seminar on "New Methods in Searching the Literature." From May 28 to June 2 Mr. Beatty was in San Francisco for the annual meeting of the Special Libraries Association. On May 31 he moderated a symposium on "Reference Sources and Methods" at a joint session of the Biological Sciences and Hospital Divisions. He attended, also, the annual meeting of the American Library Association in Cleveland July 9-14.

Elections

Dr. Kenneth K. Keown, professor and chief of the section of anesthesiology, served as an oral examiner for the American College of Anesthesiologists in Washington, D. C. June 23-24. Dr. Keown was elected secretary of the Section of Anesthesiology of the American Medical Association at the annual meeting in New York June 25-30.

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Dr. Ian M. Thompson, professor of urology, has been appointed as the South Central Section representative to the research committee of the American Urological Association.

New Appointments

Dr. William D. Mayer began his duties as assistant dean in charge of student affairs July 1. He was formerly on the faculty at the University of Rochester School of Medicine and has had extensive experience in working with students. He will serve, also, as an assistant professor of pathology under the Medical Center appointment. Dr. Mayer is a graduate of Colgate University. He received his medical degree at Rochester in 1957.

Dr. Aimee Moore became director of dietetics and nutrition at the Medical Center and professor of food and nutrition in the School of Home Economics, August 1. Dr. Moore has been associate professor of institutional management at New York State College of Home Economics, a division of Cornell. She received her B.S. at the University of North Carolina, a master's from Columbia and Ph.D. from Michigan State.

Dr. Carl J. Marienfeld has been named medical director of the Missouri State Crippled Children's Service and professor of preventive medicine and public health, effective Sept. 1. He was chief of professional and technical services, Heart Disease Control Program, U. S. Public Health Service. Dr. Marienfeld was formerly on the faculty of the University of Illinois. He holds an A.B. from Wake Forest College, an M.D. from the University of Illinois and a master of public health degree from Johns Hopkins School of Public Health.

Dr. James A. Green joined the staff of the department of anatomy July 1 as associate professor. Dr. Green is an electron microscopist and endocrinologist and has been an associate professor at Indiana University since 1957. He received both his A.B. and Ph.D. degree from the University of Illinois.

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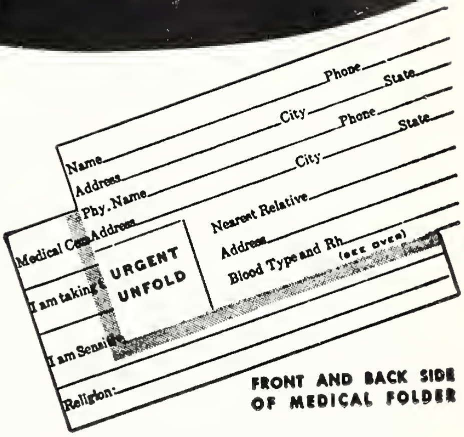
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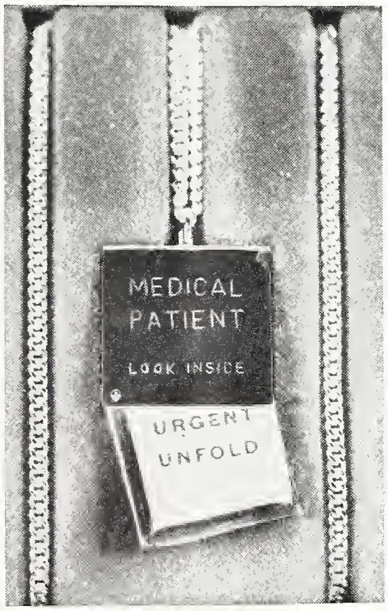
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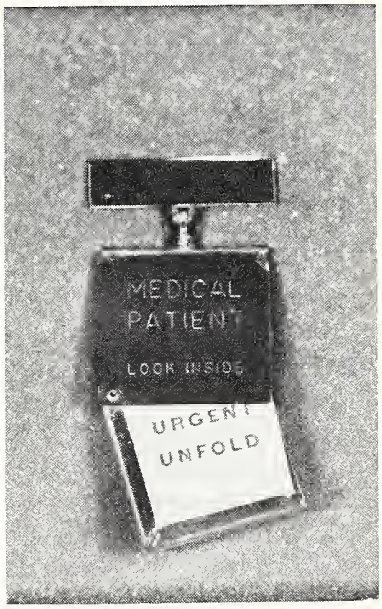
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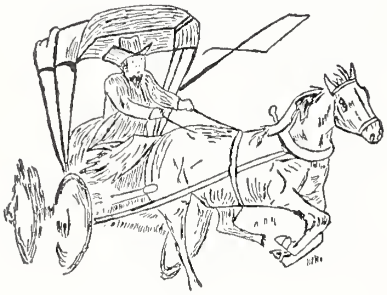


FORTY YEARS AGO

Under the presidency of Dr. Henry Schwarz, St. Louis, the American Association of Obstetricians, Gynecologists and Abdominal Surgeons will meet in St. Louis September 20, 21 and 22, at the Hotel Statler. The association was founded in 1888 to cultivate and promote knowledge relating to abdominal surgery, obstetrics and gynecology.

On June 30, the Callaway County Medical Society was host to the physicians of the surrounding counties, the occasion being the opening of the new hospital for Callaway County at Fulton. It is the second one in the state to be erected under the new law authorizing counties to vote bonds for general hospital purposes.

The recently appointed board of managers of the state eleemosynary institutions has selected Dr. George P. Ard of the United States Public Health Service, serving at St. Louis, to the important position of health supervisor and he will have direct supervision of all the institutions under the control of the board. He is well equipped to execute the duties the position places upon him, having had training with Dr. Adolph Meyer of Baltimore.

Dr. W. H. Breuer has been reappointed surgeon to the Federal Soldiers' Home at St. James.

Dr. J. H. Parker, Steelville, has accepted the position of assistant physician at the East Louisiana Hospital for the Insane at Jackson, La. Dr. Parker was formerly assistant physician at State Hospital No. 1 at Fulton, and served in a similar capacity for several years in the State Hospital at Lapeer, Mich.

The Jewish Dispensary at St. Louis, located at 9th and Carr streets, has been closed and the patients formerly treated at the dispensary will be treated at the Washington University Dispensary. The Jewish Dispensary was closed because the lease on the building had expired and no suitable location was available for continuing work.

TWENTY-FIVE YEARS AGO

The American Board of Internal Medicine, incorporated on February 28, 1936, completed its organization on June 15, 1936. The board was organized by the American College of Physicians in conjunction with the Section on Practice of Medicine of the American Medical Association and those two organizations are represented in the membership of the board. The first written examination will be held in December, 1936.

The Mississippi Valley Medical Society will convene in Burlington, Iowa, September 30 to October 2. Missouri members who will appear on the scientific program are Drs. Karl D. Dietrich, Columbia; Spencer L. Freeman, Kirksville; F. V. Emmert, Louis H. Jorstad, Roland M. Klemme, Quitman U. Newell, Howard Rusk and F. H. Ewerhardt, St. Louis.

The United States death rate is calculated at 11 per thousand. This includes the Southern states, with a colored population not found in any European country. If this section were excluded and only the states having a population and a geographic location comparable to that of the European nation with compulsory insurance systems were considered, this country would show a lower death rate that that of any of the insured countries. Only one South American country, Chile, has a system of compulsory sickness insurance. This country had a death rate of 26.8 in 1934 as compared with 11.8 in Argentina and of 10 in Uruguay, in neither of which countries is there an insurance system.

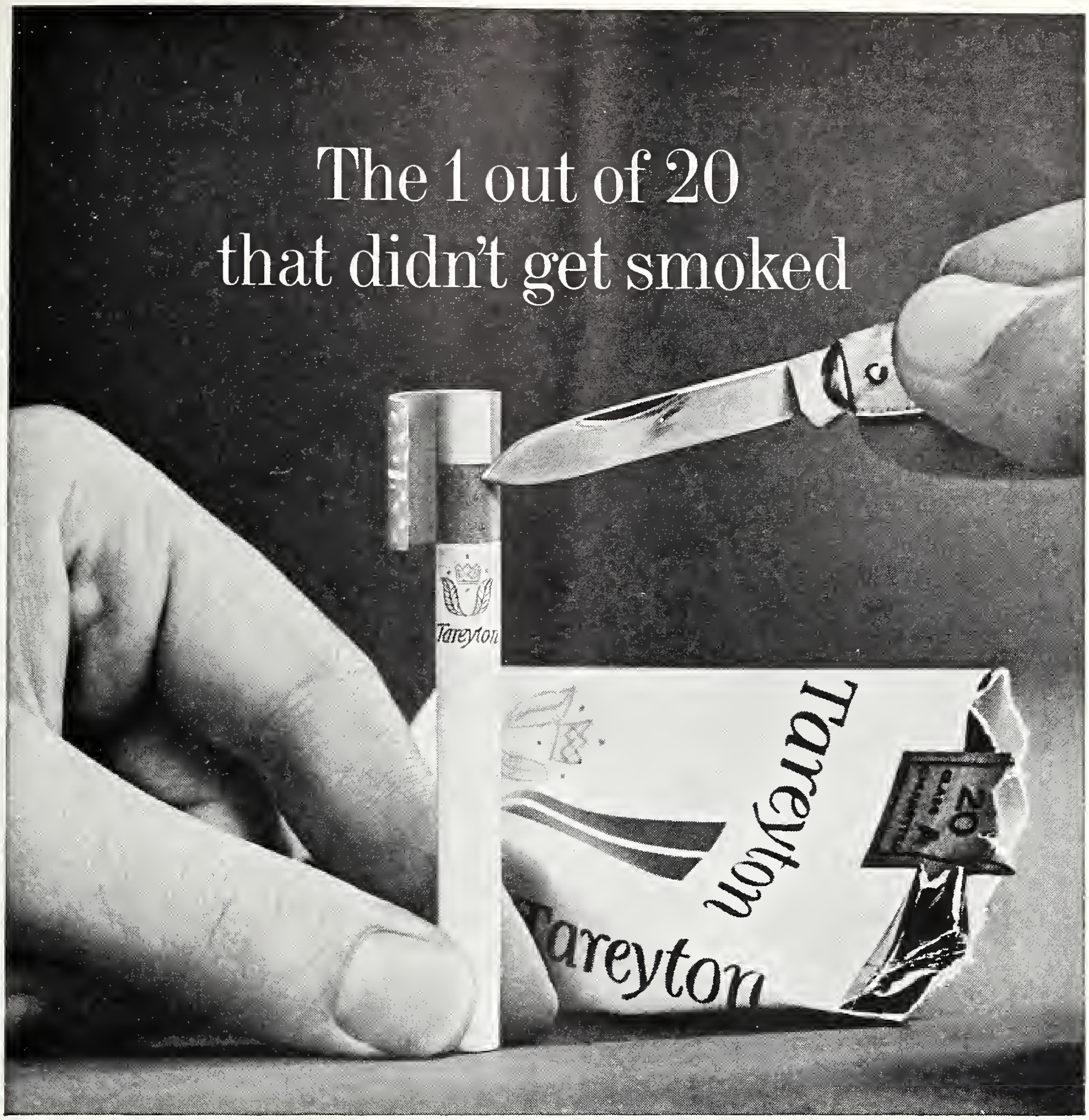
TEN YEARS AGO

James R. McVay, M.D., Kansas City, was reelected Chairman of the Council on Medical Service of the American Medical Association at a meeting on August 4. This is Dr. McVay's fourth consecutive chairmanship of the Council.

W. H. Allen, M.D., Hume, was honored by his town and community at a potluck supper and program in the Legion Hall, Hume, on July 10.

Melvin A. Casberg, M.D., St. Louis, Dean,

(Continued on page 1000)



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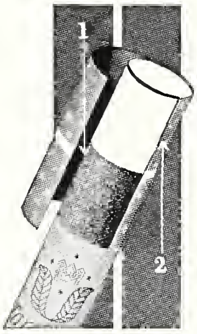

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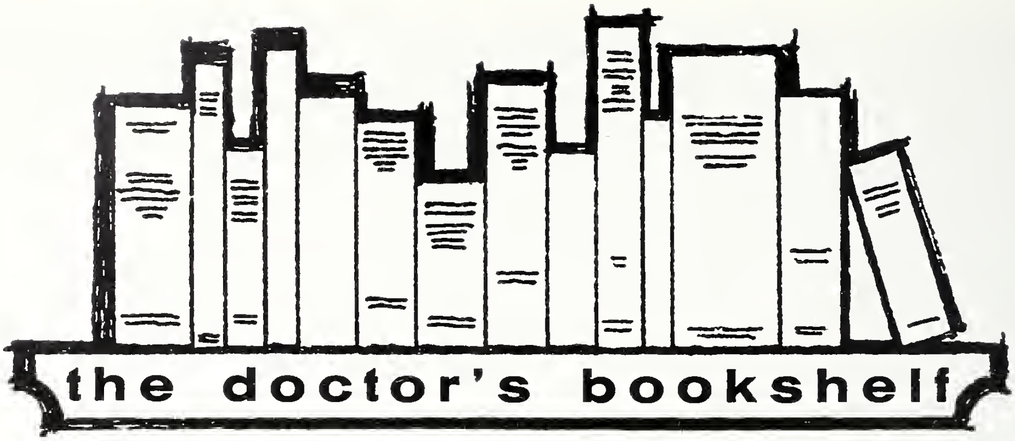

the doctor's bookshelf

BOOK REVIEWS

A Synoposis of Contemporary Psychiatry, by George A. Ulett, B.A., M.S., Ph.D., M.D., Professor of Psychiatry, Department of Psychiatry and Neurology, Washington University School of Medicine, St. Louis, Mo.; Director of Psychiatric Services, Hospital Division, City of St. Louis, St. Louis, Mo.; Medical Director, Malcolm Bliss Mental Health Center, St. Louis, Mo.; and D. Wells Goodrich M.D., Chief, Biosocial Growth Center, National Institute of Mental Health, National Institutes of Health, United States Public Health Service, Department of Health, Education and Welfare, Bethesda, Md. The C. V. Mosby Company, St. Louis, 1960, Second Edition. Price: $6.50.

The authors specify in the introduction that this book is a brief synopsis of psychiatry designed for medical students, interns and first year residents. It is also suited for instruction to student nurses, graduate nurses, hospital aids and ancillary hospital personnel such as occupational therapists. The book is pocket size and its 297 pages of reading matter are organized for quick, easy reference on any topic in psychiatry.

The book is comprehensive. All psychiatric illnesses are covered briefly. Sections are devoted also to the history of psychiatry, psychologic testing, electroencephalography, forensie psychiatry, and other special topics. Particular attention is given to a detailed listing of the medications used in emotional illness; dosages, indications and side effects are specified.

The text is clearly and directly written. The approach is eclectic; a fair presentation of organic, interpersonal and Freudian psychoanalytic schools of thought is made. The material is printed in a manner which allows easy reading and quick coverage of each subject.

The practicing physician might find this book useful for quick, brief review of a topic, but the book is not designed for instruction on treating the problems of everyday medical practice. For example, one page is devoted to anxiety states, which are the most common disorders the general physician will encounter in practice. The equally common disorder, phobic illness, is covered in half a page. All of child psychiatry is covered in four pages. The tables of pharmacologic agents are excellent, but no attempt is made to select those medications which will be most useful to the general physician.

This synopsis of contemporary psychiatry can be recommended as a good book for quick, brief reference by physicians. This is the second edition of this work which will probably go into several more editions over the years as it meets the immediate needs of the audience to which it is addressed. A. H. C.

Procedures in Vascular Surgery, by Richard Warren, M.D., Clinical Professor of Surgery, Harvard Medical School. Little, Brown and Company, Boston and Toronto, 1960. Price: $12.00.

The author has given objectives, indications, contraindications, preoperative preparations and pictorial descriptions of operations in the field of vascular surgery. These include: congenital, traumatic and acquired arterial and venous lesions; amputations, diagnostic procedures, sympathectomies and management of thromboembolism.

Each subject is simply, clearly and concisely described. R. L. R.

Capsule Clinics

- The one-stage prothrombin test is highly reproducible. It is the best test for the clinical evaluation of the effect of coumarin-type anticoagulants. Messinger, W. J., and Weinter, M., Arch. Int. Med. **105**:727, 1960.

- In vitro tests show that aluminum chlorhydroxide, aluminum acetate and boric acid are good antibacterial agents against micrococci and coliform bacilli. However, potassium permanganate is a poor antibacterial agent. Blank, I. H., and Dawes, R. K., Arch. Dermatol. **81**:565, 1960.

- Certain schizophrenic patients have a strange, unpleasant body odor which is readily recognizable and apparently related to the psychosis. Smith, K., and Sines, J. O., Arch. Gen. Psychiat. **2**:184, 1960.

- Blood levels of cholesterol, phospholipid, their ratios and total lipids have a low order of significance in determining the atherosclerotic status for either individuals or groups. Wurm, M., et al. Circulation **21**:526, 1960.

- The marked variation in voiding rates of normal persons suggests that uroflometry, per se, is not a good test for diagnosing obstructive uropathy. Scott, R., and McIlhaney, J. S., J. Urol. **85**:980, 1961.

- Use of pyridoxine lozenges by pregnant women reduced the incidence of dental caries by almost 36 per cent. New York J. M. **61**:2053, 1961.

- When an uncontrolled and impressionistic method was used to evaluate a new "tranquilizer" and a new "energizer" both drugs were placebos), 53 to 80 per cent of patients were considered by the investigators to have responded favorably. Loranger, A. W., *et al.*, J.A.M.A. **176**:930, 1961.

- Esophagitis was present in 46 per cent of patients who had experienced recent hemorrhage from varices but in only 15 per cent of patients with esophageal varices who had not experienced recent bleeding. Polish, E., and Sullivan, B. H., Ann. Int. Med. **54**:908, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

H. R. 10 Has Little Prospect of Passing

The Senate Finance Committee on August 25 ordered favorably reported a modified version of H. R. 10. The House passed version of H. R. 10 allowed self-employed persons to deduct $2,500 and only employers who had four or more persons working for them would have to set up a pension program for their employees to take advantage of the plan themselves.

As amended by the Senate Finance Committee, the bill would authorize a self-employed individual to contribute 10 per cent of his earned income or $2,500, whichever is less, toward a retirement plan. A 100 per cent tax deduction would be permitted on the first $1,000 contributed and 50 per cent on the remaining $1,500. Therefore, the maximum amount deductible for income tax purposes would be $1,750.

A self-employed person wishing to establish a plan for himself would have to cover all fulltime employees with more than three years of service. The benefits for employees would have to be vested in the employee immediately. Benefits would not be payable before age 59½ except in case of permanent disability or death. Payment would have to begin at age 70½.

The Treasury Department estimated that the House version would reduce federal revenues by as much as $358 million a year. As modified by the Senate, the proposal would reduce federal revenues by about $200 million a year.

However, there seems to be little chance that either bill will be passed by this session of Congress.

Influenza Epidemic Predicted

Dr. Luther L. Terry, Surgeon General of the U. S. Public Health Service, predicted that there will be a new influenza epidemic in the United States this fall and winter.

He urged immediate vaccinations for people over 65, pregnant women and persons with heart disease and other chronic illnesses.

"We are probably due for some Asian flu outbreaks, since they come in two or three year cycles," Dr. Terry said, "and we are overdue for type B flu outbreaks which come in four to six year cycles."

More than 86,000 people in the three most susceptible groups died from influenza between September 1957 and March 1960. Asian flu has been dormant in this country since then. It has been more than six years since type B flu has been widespread.

Both types of flu were prevalent in other countries in 1960-61, especially in England. In 1951, when England had a similar epidemic, flu reached this country the following year.

The U. S. Public Health Service is alerting physicians, state health officers and welfare agencies to include flu shots in their programs of public assistance.

Live Virus Polio Vaccine Licensed

Type I, oral, live virus polio vaccine developed by Dr. Albert Sabin has been licensed by the U. S. Public Health Service for marketing in the United States.

However, the Public Health Service, the American Medical Association and others urged that the widest possible use still be made of the Salk killed vaccine. The principal use of the newly licensed oral vaccine this year will be against epidemic threats of Type I polio.

The license for manufacture of the oral vaccine was granted to Pfizer, Ltd., Sandwich, England, and it is being marketed in this country by Chas. Pfizer & Co., Inc., New York.

The Surgeon General of the Public Health Service has said that he expects Type II oral vaccine to be licensed soon but that it would be several months before Type III would be licensed.

Pfizer is expected to have more than 50 million doses of the Type I oral vaccine available for use by next spring at the start of the 1962 polio season. For an epidemic reserve, the Public Health Service ordered at the time of the licensing a total of 900,000 doses of the Type I vaccine in frozen form.

Information on the terms for obtaining vaccine from this epidemic reserve was sent to state and territorial health officers. All local requests must be channeled through state health departments.

Of the three types of polio virus, Type I has been responsible in recent years for between 60 and 70 per cent of all paralytic polio in this country, the Public Health Service reported. However a sampling of virus isolated from paralytic cases this year suggested that Type III may be increasing in relative importance as a cause of paralytic disease.

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By Robert D. Dripps, M.D., Professor and Chairman, Department of Anesthesia; James E. Eckenhoff, M.D., Professor of Anesthesia, Both at the University of Pennsylvania Schools of Medicine; and Leroy D. Vandam, M.D., Clinical Professor of Anesthesia, Harvard Medical School, Director of Anesthesia, Peter Bent Brigham Hospital, Boston. About 407 pages, 6"x9¼", illustrated. About $7.00.

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By Eliot Corday, M.D., F.A.C.P., F.A.C.C., F.C.C.P., Assistant Clinical Professor of Medicine, School of Medicine, University of California, Los Angeles; and David W. Irving, M.D., Clinical Assistant, School of Medicine, University of California, Los Angeles. About 384 pages, 6½" x 9¼", with 223 illustrations. About $9.00.

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Across
Missouri

Better Late—Than Larger Penalty

The Missouri Withholding Act which became effective on July 1, 1961, provides in addition to the withholding of tax on all income the filing of a declaration of estimated tax by a self-employed individual. The first declaration of estimated tax and payment was due on September 15.

The declaration applies to all individuals who have a gross income from sources other than wages of $500.00 or more and whose gross income can reasonably be expected to exceed $2,100.00. Forms for filing of this report are available from the Department of Revenue or from branch offices throughout the state.

Rise in Health Costs

The U. S. Bureau of Labor Statistics has reported that health costs have risen in various parts of the country from 2 to 21 per cent since 1958. Among the cities reported on is St. Louis and the cost changes from 1958 to 1960 are in hospital cost per day, semi-private, $14.60 in 1958, and $16.00 in 1960. Other average costs varied for office visits from $3.57 to $4.28; house visits from $5.43 to $7.39; obstetrical cases from $116.67 to $125.00; appendectomies from $175.00 to $180.00; tonsillectomies from $75.83 to $77.00, and in the dental field, a tooth filling from $5.00 to $5.17.

By comparison with other parts of the country, in Los Angeles a visit to a physician's office cost $6.25 during the last quarter of 1960; in Minneapolis and Cincinnati, the fee averaged $4.00; in Atlanta it was $4.24; Boston, $4.64; Philadelphia $4.19, and New York, $5.50.

Hospital costs in Chicago showed the greatest percentage of rise, 21 per cent, and in Washington, D. C., the lowest, 2 per cent. Highest costs in the nation were in Boston, San Francisco and Los Angeles.

Health Protection Coverage Increases

Missouri is one of twenty-seven states in which more than two thirds of their population is protected by some form of voluntary health insurance.

The Health Insurance Institute shows that 80.8 per cent of the civilian population in Missouri is covered by health insurance. The national coverage figure is given as 73 per cent. Ahead of Missouri at the close of 1960 was New York with a coverage figure of 90.7 per cent, Pennsylvania and Rhode Island each with 87.4 per cent, Ohio with 86.2 per cent, Connecticut with 86.0 per cent, Illinois with 84.0 per cent and Delaware with 80.9 per cent.

The increase in health protection insurance has increased rapidly from 9 per cent in 1940, 51 per cent in 1950, and the 73 per cent in 1960.

Communicable Disease in Missouri

Comparison of communicable disease incidence in Missouri at the end of July, compared with the same date last year shows poliomyelitis six cases this year, four last year; meningococcal infections, 24 and 14; diphtheria, none and two; no whooping cough either year; scarlet fever 582 and 700; hepatitis 977 and 563.

New Civil Defense Emergency Hospitals

Ten additional Civil Defense Emergency Hospitals are being stored in Missouri, according to the Missouri Civil Defense Director. They are located at DeSoto, Aurora, Golden City, Willow Springs, Lockwood, Brunswiek and New Haven. Missouri has previously had 58 of the emergency hospitals stored in the state and 11 additional sites have been approved for location of hospitals when additional units are made available by the federal government. These locations are Orrick, Gentry County, Smithville, Macon, Oregon County, Edgerton, Fenton, St. Joseph, New London, Plattsburgh, and St. Louis County.

Increased State Payroll

The recent Missouri Legislature increased the number of state employees by 1,845. Of these 457 go to the Division of Mental Diseases as part of the 10-year expanding mental health improvement program.

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PROGRAM

Saturday, November 4, 1961

SYMPOSIUM ON THERAPEUTICS

9:00 a.m. Business Session
10:00 a.m. Recent Advances in the Therapy of Hypertension, John H. Moyer, M.D., Philadelphia, Professor of Medicine and Chairman of the Department of Internal Medicine, Hahnemann Medical College and Hospital.
10:20 a.m. Arteritis Associated With Prolonged Corticosteroid Therapy, Paul O. Hagemann, M.D., St. Louis, Assistant Professor of Clinical Medicine, Washington University School of Medicine; Chief of Medicine, St. Luke's Hospital.
10:40 a.m. Intermission to View Exhibits.
11:10 a.m. Vancomycin in the Treatment of Staphylococcal Bacteremia, Robert Weber, M.D., Kansas City, Kansas, Assistant Professor of Medicine and Microbiology, University of Kansas School of Medicine.
11:30 a.m. Pharmacodynamics and Management of Salt and Water Retention Syndrome, John H. Moyer, M.D., Philadelphia.
11:50 a.m. Panel Discussion on Therapeutics.
12:30 p.m. Lunch and Exhibits.

GENERAL SESSION

2:00 p.m. The Business of Practicing Medicine, Mr. Horace Cotton, Oradell, N. J., Contributing Editor, *Medical Economics.*
2:40 p.m. Carcinoma in Situ of the Cervix, Ralph A. Reis, M.D., Chicago, Editor, *Obstetrics and Gynecology,* Journal of the American College of Obstetricians and Gynecologists; Professor of Obstetrics and Gynecology, Northwestern University School of Medicine.
3:00 p.m. Intermission to View Exhibits.
3:30 p.m. The Potential of Suggestive Therapy in General Practice, Gilbert B. Kelley, M.D., Savannah, Mo., General Practitioner, Member, Missouri Academy of General Practice.
3:50 p.m. Specific Diagnosis in Allergy: Inhalants and Foods, Herbert J. Rinkel, M.D., Kansas City, Allergist.
4:10 p.m. Planned Labor, Ralph A. Reis, M.D., Chicago.
4:30 p.m. Panel Discussion on General Session.

PRESIDENT'S INSTALLATION BANQUET

7:30 p.m. President's Installation Banquet.
The Scrawl on the Wall for Medicine, Mr. Horace Cotton, Oradell, N. J.

Sunday, November 5, 1961

SYMPOSIUM ON MEDICINE

9:00 a.m. A More Critical Evaluation of the Anemic Patient, Charles C. Sprague, M.D., New Orleans, Associate Professor of Medicine, Director of Division of Hematology, Tulane University School of Medicine.
9:20 a.m. Laboratory Procedures for the Doctor's Office, Robert T. Manning, M.D., Kansas City, Kansas, Associate Professor of Internal Medicine, University of Kansas School of Medicine.
9:40 a.m. Diagnostic Procedures in Adrenocortical Disorders, James C. Melby, M.D., Little Rock, Assistant Professor of Medicine and Program Director, Clinical Research Faculty, University of Arkansas School of Medicine.
10:00 a.m. Functional Gastrointestinal Disorders, Arthur P. Klotz, M.D., Kansas City, Kansas, Associate Professor of Medicine, Chief, Section of Gastroenterology, University of Kansas School of Medicine.
10:20 a.m. Intermission to View Exhibits.
11:00 a.m. Autoimmune Disorders, Charles C. Sprague, M.D., New Orleans.
11:20 a.m. Corticosteroid Therapy in Medical Emergencies, James C. Melby, M.D., Little Rock.
11:40 a.m. Panel Discussion on Medicine.
12:15 p.m. Lunch and Exhibits.

(Continued on page 1062)

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Woman's Auxiliary

The recent Fall Executive Board Meeting was planned as a briefing session in all phases of Auxiliary program. County Presidents were given the over-all picture of our program, and what aids and assistance could be afforded them in presenting our activities on the local level.

Mrs. Frederick E. Wade

It is interesting to note, that our Auxiliary program could be completely adopted by any community or civic-minded group, without any conflict of interest, even including our critics in the labor unions. Our Auxiliary, like the medical profession which it seeks to serve, is not dictated by selfish personal interest, but rather by genuine, deep and concerning interest about what is best for all Americans, not just physicians and their families.

The national theme this year is, "Speak Your Beliefs in Deeds." What is our Auxiliary program, and how are we using it to benefit our communities? We should evaluate all our activities with this yardstick.

Legislation has probably been our most active, and controversial, program this past year. Our Auxiliary role on the legislative front has been devoted to having informed, registered, and voting citizens, not only among our own members but in our communities. Our Auxiliary responsibility has been devoted to education and information on all sides of issues. We believe balloting should be on the basis of understanding, and not pressure or self-interest. We know if our members are informed on legislative matters, they will be intelligent voters. We realize the future of the country depends upon the wisdom exercised at the ballot box.

Our community service program is aimed to strenghten and serve our communities through the Auxiliary. This includes giving active support to civic and service organizations. Our countless members active in Parent-Teacher Association, health and welfare organizations, and other civic agencies are serving their communities, which is the true aim of all Auxiliary programs.

In the area of Civil Defense our program has centered on preparedness for home and family survival, and action in any disaster or emergency. Our goals are to have every family informed as to needs and nature of Civil Defense, and trained and equipped for emergencies. The Berlin crisis has aroused some of the indifference in this country, and our Auxiliary program is of value in peace as well as war.

The medical profession is interested not only in providing the finest medical care in the world for Americans today, but is interested in seeing it continued in the future, as well. For this reason, we have a vital interest in the support of our nation's medical schools through the American Medical Education Foundation. Aiding our young people with knowledge of the opportunities for service in the field of Health Careers is one of the most rewarding Auxiliary projects.

In the field of mental health, we have a great challenge in our state. Our purpose in this program is to learn more about local and state mental health problems and work toward their solution. Missouri has a plan, which with adequate support, can lead to solution of our desperate needs in this area.

Our safety program is centered on accident prevention, and to encourage activities based on safety needs in our county and state. Our newest program on Rural Health is designed to cooperate with farm organizations, rural health councils, medical societies and related groups in the solution of rural health problems.

These various programs mentioned are the areas in which our Auxiliary is working toward education and informed action. This certainly is not a program slanted to the interests of doctors' wives only, it is a program of vital interest to every American. I think our program, truly reflects the attitude of the medical profession which seems to us that the greatest service we can give, is to give service to others.

We realize every Auxiliary cannot be active on all our program fronts, and we prefer to adjust our program to our community needs. The only reason for the state, and national Auxiliary, is to provide assistance and coordination to counties in carrying out the actual auxiliary work.

As the Golden Orators of old might say, "We

(Continued on page 1064)

Volume 58, Number 10—October, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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JAMES H. UTLEY, M.D.; JULIO O. COPPO, M.D.;
GEORGE W. DUANE, M.D., *and* JAMES G. JANNEY, JR., M.D., *St. Louis*

Chlorothiazide and Hydrochlorothiazide

A Clinical Comparative Study

A comparative clinical evaluation of the antihypertensive effect of chlorothiazide and hydrochlorothiazide made during the course of treatment of 26 edema-free hypertensive patients is reported.

Dr. Utley is a Research Fellow in Cardiology, American Heart Association; Dr. Coppo is a Research Fellow in Cardiology, St. Louis Heart Association; Dr. Duane is from the Department of Medicine, St. Louis University School of Medicine; Dr. Janney is Associate Professor of Clinical Medicine and Director of Cardiology, Department of Medicine, St. Louis University School of Medicine. All are from the Department of Medicine, St. Louis University School of Medicine and the University Hospital (Firmin Desloge Hospital), St. Louis.

Chlorothiazide and hydrochlorothiazide are recognized as potent adjuvant antihypertensive agents with relatively minor side effects.[1, 6, 16] Clinical comparative studies of these thiazide compounds have been primarily concerned with their diuretic effects but their comparative hypotensive potentialities have not been adequately studied. [3, 4, 5, 8, 9, 12, 13, 14] Hollander et al. have recently stated that about 10 per cent of their patients appeared to have a greater blood pressure response to hydrochlorothiazide than to chlorothiazide therapy.[9] They reported a mean blood pressure decrease of 19 mm. Hg in patients treated with hydrochlorothiazide alone, whereas chlorothiazide produced a mean blood pressure reduction of 14 mm. Hg. Recently Meltzer et al. have found a 10 per cent or greater reduction in the blood pressure of 27 of 60 patients 12 weeks after the substitution of hydrochlorothiazide for chlorothiazide.[14] On the other hand, Rosenfeld and Brest found a reduction in the mean blood pressure values of 20 mm. Hg or more in a large number of patients when treated with chlorothiazide than when treated with hydrochlorothiazide.[16] In view of the few clinical comparative studies on the hypotensive effects of the two drugs and the inconsistencies in the reported data, the following study was undertaken. Since there was little information reported on the relative effects of the drugs during simultaneous administration of ganglionic blockers, data were also collected to elucidate this point During therapy with the thiazides hypokalemia without significant symptoms has been reported frequently.[5, 15, 16] For this reason potassium supplementation has been recommended with long term therapy with these drugs.[5, 8] The significance of these observations was also evaluated in this study.

Chlorothiazide was kindly supplied by Merck Sharp and Dohme and hydrochlorothiazide by Ciba Pharmaceutical Co.

Material and Methods

Twenty-six patients with arterial hypertension were studied. The duration of hypertension prior to treatment with the thiazide compound varied from three to 30 years, the average being 12.8 years. Prior to this study these patients had been followed in the Hypertension Clinic for an average period of two years, the range being from three months to five years. Twenty-five patients had essential hypertension and one had hypertension secondary to chronic pyelonephritis. Significant associated conditions included obesity in 12 patients, pyelonephritis in one, diabetes mellitus in three, glaucoma in one, chronic osteoarthritis in two, menopausal syndrome in one and hemiparesis due to cerebral thrombosis in one. None of the patients had congestive heart failure. The average blood pressure response, the incidence and severity of side effects, the therapeutic response, the severity index response,[2, 10] the average daily doses of medications and serum potassium levels were determined. At each weekly visit of an individual patient, the same physician took four blood pressure readings. The first was taken with the patient in the sitting position, the second with the patient in the supine position, the third after 10 minutes rest in the lying position and the fourth with the patient in the standing position. The last two determinations are considered to be the most significant and form the basis for the subsequent averages. Control blood pressures were determined by averaging the weekly blood pressure values during at least four visits prior to the administration of any antihypertensive medication.

The severity of the following side effects was graded from 1+ to 3+: dizziness, weakness, blurring of vision, dryness of the mouth, headache, constipation and postural hypotension. In general, 1+ represents mild reactions which do not interfere with ordinary activities, 2+ represents moderate side effects which occasionally interfere with normal activities, and 3+ represents severe side effects which result in the patient's inability to perform normal activities. The incidence and severity of the side effects throughout the study are shown in tables 1, 2 and 3 and compared by calculating the side effect index.[2] This index takes into consideration the severity of a given side effect, the number of patients experiencing it and the number of days of its occurrence per month and therefore permits an accurate clinical comparison. Serum potassium levels were determined every four to six weeks and whenever symptoms suggestive of possible hypokalemia occurred.

The therapeutic response was classified as excellent, moderate, fair or poor according to the blood pressure response and the presence of side effects, as described elsewhere.[2, 10] An excellent response was considered to have been achieved when the standing diastolic pressure was consistently less than 95 mm. Hg and the side effects were minimal or absent. A moderate response was said to have been obtained when the standing diastolic pressure was consistently between 95 and 105 mm. Hg and side effects were no more than moderate. A fair response was said to be present when the standing diastolic pressure was above 105 mm. Hg but showed a reduction of 15 mm. Hg or greater from control levels or when the diastolic pressure was inconsistently reduced to levels below 105 mm. Hg and the side effects were not more than moderate. A poor response was said to be present when the standing diastolic pressure was not significantly reduced, when the diastolic pressure was inconsistently reduced and remained above levels of 105 mm. Hg or when side effects were severe. The severity index of the hypertensive disease was classified according to Goodyer's criteria.[7]

Of the 26 patients studied 19 had been treated with trimethidinium methosulfate as previously reported.[10] Prior to therapy with the thiazide compounds the hypertensive disease in this group was classified as moderate in 47 per cent and mild in 53 per cent. The results during the last 36 weeks of trimethidinium therapy are included for comparison with the present study. These 19 patients, together with an additional case of severe hypertension not treated with trimethidinium alone, are the 20 patients which constitute Group I of this study. The 20 patients were maintained on combined therapy for 16 weeks. Chlorothiazide* was then replaced by hydrochlorothiazide for 44 weeks. At the beginning of chlorothiazide therapy the trimethidinium dosage was decreased by 50 per cent. The chlorothiazide dosage was initially 250 mg. twice a day and was subsequently increased to a maximum of 500 mg. three times a day depending upon the blood pressure response. If hypertension persisted after the maximum dose of chlorothiazide had been reached, trimethidinium was gradually increased until normal blood pressures were obtained or until side effects prevented further increases. In the second part of the study of Group I, chlorothiazide was discontinued and replaced by hydrochlorothiazide, the initial dose being 25 mg. twice a day. This dose was increased to a maximum of 50 mg. three times a day, depending upon the blood pressure response. Trimethidinium was not increased except when the blood pressure remained elevated after reaching the maximum dose of hydrochlorothiazide. Nine patients were maintained on the same dose of reserpine and/or hydralazine throughout the study, the maximum doses being 1 mg. and 400 mg. per day, respectively.

---

* Chlorothiazide was kindly supplied by Merck Sharp and Dohme and hydrochlorothiazide by Ciba Pharmaceutical Co.

The remaining six of the 26 patients constitute Group II. The severity of the hypertension was moderate in 67 per cent and mild in 33 per cent. These patients did not receive trimethidinium methosulfate but were treated with chlorothiazide and hydrochlorothiazide for 16 and 44 weeks, respectively. The initial doses and subsequent increases were the same as for the first group. All patients in both groups were permitted a regular diet, no attempt being made to limit salt or to supplement potassium intake.

RESULTS

The effects of chlorothiazide and hydrochlorothiazide on the blood pressure, side effects, therapeutic response and severity index in relation to drug dosage are shown for Group I in tables 1 and 3. Following therapy with trimethidinium alone there was a reduction in the average blood pressure values from 200/118 supine and 181/123 standing to 172/106 supine and 145/98 standing. No significant further blood pressure response was observed during combined therapy with chlorothiazide and trimethidinium, whereas a further reduction was observed in both supine and standing positions during therapy with trimethidinium and hydrochlorothiazide. Sixteen of the patients experienced diastolic

TABLE 1

EFFECTS OF CHLOROTHIAZIDE AND HYDROCHLOROTHIAZIDE IN 20 PATIENTS RECEIVING ADJUNCTIVE TRIMETHIDINIUM METHOSULFATE THERAPY

		Control Values			*Trimethidinium*			*Trimethidinium and Chlorothiazide*			*Trimethidinium and Hydrochlorothiazide*		
		AVERAGE	RANGE		AVERAGE	RANGE		AVERAGE	RANGE		AVERAGE	RANGE	
Blood Pressure Response	SUPINE	$\frac{200}{118}$	$\frac{145}{105}$	$\frac{250}{140}$	$\frac{172}{106}$	$\frac{149}{88}$	$\frac{221}{120}$	$\frac{161}{102}$	$\frac{137}{91}$	$\frac{191}{115}$	$\frac{152}{95}$	$\frac{136}{74}$	$\frac{180}{103}$
	STANDING	$\frac{181}{123}$	$\frac{152}{108}$	$\frac{196}{130}$	$\frac{145}{98}$	$\frac{99}{76}$	$\frac{187}{117}$	$\frac{140}{97}$	$\frac{121}{86}$	$\frac{172}{109}$	$\frac{133}{88}$	$\frac{118}{72}$	$\frac{161}{97}$
					Per Cent			Per Cent			Per Cent		
Incidence of patients experiencing side effects	Dizziness				47			35			35		
	Weakness				47			25			40		
	Blurring of vision				42			20			10		
	Dryness of mouth				42			20			25		
	Headaches				37			10			10		
	Constipation				32			40			25		
	Postural hypotension				16			20			25		
Therapeutic response	Excellent				47			55			65		
	Moderate				21			20			35		
	Fair				16			25			—		
	Poor				16			—			—		
Severity index response	Mild	37%			53			—			65		
	Moderate	63%			47			—			35		
	Severe	——			—			—			—		
	Malignant	——			—			—			—		
Dose of medication per day					Average	Range		Average	Range		Average	Range	
	Trimethidinium				269 mg.	66-789 mg.		167 mg.	40- 540 mg.		184 mg.	0-462 mg.	
	Chlorothiazide							1,000 mg.	234-1,326 mg.				
	Hydrochlorothiazide										112 mg.	34-150 mg.	

blood pressure reductions in the upright position.

The side effects showing the highest indices during trimethidinium methosulfate alone were dryness of mouth, headache, weakness, dizziness, constipation and blurring of vision. During the administration of chlorothiazide and trimethidinium there were increases in the side effect indices of constipation, dryness of mouth and blurring of vision. There were decreases in the indices of headache, weakness and dizziness.

Following the substitution of hydrochlorothiazide for chlorothiazide, there were increases in the side effect indices of constipation, weakness and postural hypotension. There were reductions in the indices of blurring of vision and dryness of mouth.

The therapeutic response following therapy with trimethidinium methosulfate alone was excellent in 47 per cent, moderate in 21 per cent, fair in 16 per cent and poor in 16 per cent of the patients. During therapy with chlorothiazide and trimethidinium the therapeutic response was excellent in 55 per cent, moderate in 20 per cent and fair in 25 per cent; no poor responses were observed. With the substitution of hydrochlorothiazide for chlorothiazide the therapeutic response was excellent in 65 per cent and moderate in 35 per cent. No fair or poor responses were observed.

Prior to the beginning of therapy, of the 19 patients initially treated with trimethidinium, 37 per cent had a mild severity index and 63 per cent moderate. After trimethidinium and prior to the study with thiazide compounds 53 per cent had a mild severity index and 47 per cent moderate. At the end of the 16 weeks of chlorothiazide therapy the severity index was not determined because of the relatively short time interval. Following combined therapy with hydrochlorothiazide and trimethidinium in the 20 patients who constitute Group I, 65 per cent had a mild severity index and 35 per cent moderate.

Prior to the addition of the thiazide compounds, the average daily dose of trimethidinium was 269 mg. During combined therapy with trimethidinium and chlorothiazide, the average daily doses were 167 mg. and 1,000 mg., respectively. In the last part of the study the average daily doses of trimethidinium and hydrochlorothiazide were 184 mg. and 112 mg., respectively.

Of the 19 patients initially treated with trimethidinium nine patients in the group received

TABLE 2

EFFECT OF CHLOROTHIAZIDE AND HYDROCHLOROTHIAZIDE IN SIX PATIENTS WITHOUT ADJUNCTIVE TRIMETHIDINIUM METHOSULFATE THERAPY

		Control Values			*Chlorothiazide Only*			*Hydrochlorothiazide Only*		
		AVERAGE	RANGE		AVERAGE	RANGE		AVERAGE	RANGE	
Blood Pressure Response	SUPINE	197/113	185/108	205/120	152/87	133/82	174/93	139/85	114/80	164/89
	STANDING	189/112	175/104	198/126	131/88	113/76	152/98	133/84	125/75	139/91
					Per Cent			Per Cent		
Incidence of side effects					0			0		
Therapeutic response	Excellent				100			100		
	Moderate									
	Fair									
	Poor									
Severity index	Mild	33%			—			65		
	Moderate	67%			—			35		
	Severe	—			—					
	Malignant									
Dose of medication per day					Average 1,083 mg.	Range 1,000-1,500		Average 100 mg.	Range	

TABLE 3

COMPARISON OF INCIDENCE AND SEVERITY OF SIDE EFFECTS

	Trimethidinium			*Trimeth. Plus Chloroth.*			*Trimeth. Plus Hydrochloroth.*			*Ratio of Side Effect Index*
Dizziness	PATIENTS	NO. DAYS PER PT./MO.	SIDE EFFECT INDEX	PATIENTS	NO. DAYS PER PT./MO.	SIDE EFFECT INDEX	PATIENTS	NO. DAYS PER PT./MO.	SIDE EFFECT INDEX	
0	11			12			15			
	—			—			—			
1+	6	1.7	10.2	6	0.8	4.8	2	0.9	1.8	
2+	3	1.4	8.4	2	0.3	1.2	3	0.2	1.2	
3+	0	0	0	1	0.3	0.9	1	0.1	0.3	0.48
Total	9		18.6	8		6.9	5		3.3	
Weakness										
0	11			15			10			
	—			—			—			
1+	6	1.7	10.2	5	1.0	5.0	9	1.3	11.7	
2+	3	1.7	10.2	1	0.5	1.0	7	0.7	9.8	
3+	0	0	0	2	0.5	3.0	3	0.3	2.7	2.68
Total	9		20.4	5		9.0	10		24.2	
Bl. of Vi.										
0	12			16			18			
	—			—			—			
1+	8	1.6	12.8	4	4.3	17.2	1	0.2	0.2	
2+	0	0	0	1	1.0	2.0	1	0.1	0.2	
3+	0	0	0	0	0	0	0	0	0	0.02
Total	8		12.8	4		19.2	2		0.4	
D. O. M.										
0	11			16			12			
	—			—			—			
1+	7	4.0	28.0	4	6.8	27.2	8	2.3	18.4	
2+	2	1.5	6.0	3	3.3	19.8	1	9.1	18.2	
3+	0	0	0	0	0	0	0	0	0	0.78
Total	9		34.0	4		47.0	8		36.6	
Headache										
0	14			18			18			
	—			—			—			
1+	4	5.0	20.0	2	0.9	1.8	2	0.2	0.4	
2+	2	2.0	8.0	0	0	0	2	0.3	1.2	
3+	0	0	0	0	0	0	0	0	0	0.88
Total	6		28.0	2		1.8	2		1.6	
Constip.										
0	13			10			14			
	—			—			—			
1+	6	2.0	12.0	9	5.2	46.8	6	13.5	81.0	
2+	1	2.8	5.6	4	1.1	8.8	1	2.0	4.0	
3+	0	0	0	0	0	0	0	0	0	1.53
Total	7		17.6	10		55.6	6		85.0	
Post. Hyp.										
0	17			16			15			
	—			—			—			
1+	3	1.3	3.9	3	0.4	1.2	4	2.0	8.0	
2+	0	0	0	1	0.5	1.0	4	0.7	5.6	
3+	0	0	0	2	0.3	1.8	2	0.5	3.0	4.15
Total	3		3.9	4		4.0	5		16.6	

ancillary medications of hydralazine and reserpine; their average blood pressure response was identical with that of the entire group in both supine and standing positions. During therapy with trimethidinium and chlorothiazide five patients received hydralazine as ancillary medication, four of which had an excellent response and one fair. In the last part of the study when chlorothiazide was replaced by hydrochlorothiazide the five patients receiving hydralazine as ancillary medication had an excellent response.

The effects of chlorothiazide and hydrochlorothiazide upon blood pressure, side effects, therapeutic and severity index responses and upon the dosage requirements of antihypertensive medication of the six patients in Group II are shown in table 2. No side effects were observed in this group. The therapeutic response was excellent in the six cases during therapy with each of the thiazide compounds. Prior to receiving any medications 67 per cent of the patients had a moderate severity index and 33 per cent mild. Chlorothiazide was given in an average daily dose of 1,083 mg. The daily dose of hydrochlorothiazide for each patient in this group was 100 mg. Throughout the study with chlorothiazide and hydrochlorothiazide one patient received associated hydralazine therapy and another reserpine.

Serum potassium determinations of the 26 patients in the study (Groups I and II) showed no significant reductions even though no potassium supplements were given. The serial potassium levels frequently showed slight reductions but in no case was the reduction below the limits of normal, the lowest potassium level observed being 3.5 mEq. per liter.

Discussion

Most of the patients in this study experienced greater blood pressure reductions during hydrochlorothiazide than during chlorothiazide therapy. During the combined chlorothiazide and trimethidinium therapy, the 20 patients in Group I had average supine and standing systolic blood pressure reductions below their original control levels of 39 mm. Hg (19.5 per cent) and 41 mm. Hg (23.7 per cent), respectively. The average supine and standing diastolic pressure reductions were 16 mm. Hg (13.6 per cent) and 26 mm. Hg (21.1 per cent), respectively. However, on hydrochlorothiazide and trimethidinium the average supine and standing systolic blood pressure reductions below the original control levels were 48 mm. Hg (24 per cent) and 47 mm. Hg (26 per cent), respectively. The average supine and standing distolic pressure reductions were 23 mm. Hg (15.5 per cent) and 35 mm. Hg (28 per cent), respectively.

Smaller blood pressure reductions resulted from hydrochlorothiazide substitution in the therapy of the six patients of Group II, who did not receive trimethidinium. Their average supine and standing systolic blood pressure reductions from control levels on chlorothiazide were 45 mm. Hg (22.8 per cent) and 58 mm. Hg (30.1 per cent), respectively. The supine and standing diastolic blood pressure reductions were 26 mm. Hg (23 per cent) and 24 mm. Hg (21.4 per cent), respectively. Following hydrochlorothiazide administration the average supine and standing systolic blood pressure reductions were 58 mm. Hg (24.4 per cent) and 56 mm. Hg (29.1 per cent), respectively. The supine and standing diastolic blood pressure reductions were each 28 mm. Hg (24.8 per cent and 25 per cent), respectively). This observation of a greater blood pressure reduction by hydrochlorothiazide substitution in the presence of concomitant ganglionic blockade is in accord with the findings of others.[9, 14, 16]

The greater blood pressure reductions of the 26 patients in Groups I and II which were achieved during hydrochlorothiazide therapy are comparable to previous reports.[9, 11, 14, 16] In general these studies have shown that when the chlorothiazide-hydrochlorothiazide dose ratio was of the order of 10:1, hydrochlorothiazide substitution produced a greater reduction in blood pressure than that obtained with chlorothiazide. On the other hand, Rosenfeld and Brest reported that in a group of 13 patients treated with chlorothiazide alone, four patients (31 per cent) became normotensive, i.e., blood pressures reduced to 150/90 mm. Hg or less.[16] In the same study a total of eight patients (62 per cent) became normotensive and/or had mean* blood pressure reductions of 20 mm. Hg or more. Similarly, in a group of 19 patients treated with hydrochlorothiazide alone, four patients (21 per cent) became normotensive and a total of seven patients (37 per cent) became normotensive and/or experienced mean blood pressure reductions of 20 mm. Hg or more. Using the criteria of these authors for comparison table 4 shows that when the six patients in Group II of the present study were treated with chlorothiazide alone, four patients (70 per cent) became normotensive and all had mean blood pressure reductions of

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* The "mean" blood pressure as expressed by Rosenfeld and Brest is the sum of the diastolic pressure plus ⅓ of the pulse pressure.

20 mm. Hg or greater. During hydrochlorothiazide therapy in the same group, five patients (83 per cent) were normotensive and all patients had blood pressure reductions greater than 20 mm. Hg below their control values.

TABLE 4

COMPARATIVE RESULTS OF CHLOROTHIAZIDE AND HYDROCHLOROTHIAZIDE

Investigators	*Body Position*	*Medication*	*Dosage (mg./day)*	*Number of Cases*	*Normotensive*		*Normotensive and/or Significant Blood Pressure Reduction*	
					NUMBER	%		
Rosenfeld and Brest	Supine	Chlorothiazide	1,000	13	3	23	7	54
	Standing	Chlorothiazide	1,000	13	4	31	8	62
	Supine	Hydrochlorothiazide	100	19	2	10	5	26
	Standing	Hydrochlorothiazide	100	19	4	21	7	37
Utley et al.	Supine	Chlorothiazide	1,083	6	5	83	6	100
	Standing	Chlorothiazide	1,083	6	4	70	6	100
	Supine	Hydrochlorothiazide	100	6	5	83	6	100
	Standing	Hydrochlorothiazide	100	6	5	83	6	100

TABLE 5

COMPARATIVE RESULTS OF COMBINED CHLOROTHIAZIDE—AND HYDROCHLOROTHIAZIDE—GANGLIONIC BLOCKADE THERAPY

Investigators	*Medication*	*Dosage (mg./day)*	*Number of Cases*	*Responders**		*Blood Pressure Reduction***		
				NUMBER	%	*Average*	*Range*	
						MM. HG	FROM	TO
Hollander et al.	C	750.0	16	7	44	18/10	20/10	60/25
	H	75.0	16	9	56	24/14	20/10	70/30
Utley et al.	C	1,083.0	6	6	100	58/24	23/20	77/30
	H	100.0	6	6	100	56/28	37/20	63/36
Hollander et al.	C+B+R	375.0	8	5	63	34/16	20/10	80/30
	H+B	37.5	8	6	75	40/21	20/10	80/40
Utley et al.	C+B+R	1,000.0	20	15	75	41/26	12/4	87/58
	H+B	112.0	20	18	90	47/35	5/0	89/53

* "Responders" are those patients having blood pressure reductions of 14/9 mm. Hg. or greater.

** All blood pressure are expressed as mm. Hg.

C: Chlorothiazide, H: Hydrochlorothiazide, B: Ganglionic blocking agent, R: Rauwolfia drug.

Hollander et al. reported that seven (44 per cent) of 16 patients treated with chlorothiazide alone had significant blood pressure reductions (14/9 mm. Hg or greater).[9] Similarly, nine (56 per cent) of 16 patients treated with hydrochlorothiazide alone had significant blood pressure reductions. In his group of eight patients who were on combined chlorothiazide and ganglionic blockers, five patients (63 per cent) had a significant blood pressure response. In eight cases with combined hydrochlorothiazide and ganglionic blocking drug therapy, the same authors reported a significant blood pressure response in six patients (75 per cent). Using these authors' criteria for comparison (table 5), the six patients of Group II of the present study were normotensive during chlorothiazide and also during hydrochlorothiazide therapy. In the 20 patients of Group I who were on combined therapy with trimethidinium methosulfate and chlorothiazide, 15 patients (75 per cent) had a significant blood pressure response. After hydrochlorothiazide was substituted for chlorothiazide, 18 patients (90 per cent) had significant blood pressure reductions below their original levels.

Lee et al. recently reported that the mean blood pressure of their 18 patients was 219/125 prior to chlorothiazide therapy; 178/108 after eight weeks of chlorothiazide therapy; and 172/106 following replacement of chlorothiazide by hydrochlorothiazide in a 15:1 ratio. In comparison of these results with those of the six patients treated with chlorothiazide and hydrochlorothiazide in the present study (table 2), chlorothiazide resulted in a reduction average blood pressure from 189/112 to 131/88. When chlorothiazide was replaced by hydrochlorothiazide in a 10.8:1 dose ratio the blood pressure averaged 133/84 mm. Hg.

The present study offers confirmatory evidence that hydrochlorothiazide produces slightly greater diastolic blood pressure reduction than chlorothiazide when used in a ratio of the order of 1:10. It also suggests that the synergistic effect of combining a ganglionic blocking drug with a thiazide compound is greater when hydrochlorothiazide is used in such regimen.

In the evaluation of the side effects associated with antihypertensive therapy as usually reported in the literature, investigators have often given data on the percentage of patients who experience specific side effects with little information as to the severity and the duration of such reactions; however the latter factors are of great concern to clinicians and to patients. Accordingly, the side effect index and the side effect index ratio have been used in this study to evalute not only the incidence but also the severity and the duration of the side effects. As shown in table 3, the side effects in general were minimal during the two periods of combined trimethidinium-thiazide therapy as compared with those present during therapy with trimethidinium alone. However, when chlorothiazide was added to the trimethidinium therapy there were slight increases in the side effect indices of constipation, dryness of mouth and blurring of vision and a marked decrease in the indices of headache, weakness and dizziness. Following hydrochlorothiazide substitution for chlorothiazide there were decreases in the indices of dryness of mouth and blurring of vision whereas there were increases in constipation, weakness and postural hypotension. The increase in the constipation index during the two phases of thiazide therapy resulted from three patients. The increase in the postural hypotension index is due to the greater blood pressure reduction, which occurred particularly in the diastolic pressure in the standing position.

The absence of significantly lowered serum potassium levels during this study suggests that potassium supplementation of the regular diet is not recommended during therapy with the thiazide drugs in patients of this type.

The improvement of patients treated with hydrochlorothiazide is also reflected in the therapeutic response where the five patients who had only fair response on chlorothiazide had either moderate or excellent responses after the change to hydrochlorothiazide.

The average daily doses of chlorothiazide and of hydrochlorothiazide of the patients of Group I were 1,000 mg. and 112 mg., respectively, which represents a ratio of 8.9 to 1. For patients of Group II the average daily doses were 1,083 mg. and 100 mg., respectively, representing a ratio of 10.8 to 1. These drug ratios among the two groups of patients collectively represent an average chlorothiazide-hydrochlorothiazide ratio of 9.3 to 1. There was an increase in the average trimethidinium dose (from 167 mg. to 184 mg. per day) during the period of hydrochlorothiazide therapy of the patients of Group I. This increase reflects the higher doses of trimethidinium required by two patients because of their improved but persistently elevated blood pressure. If these patients were excluded, the trimethidinium dose would be essentially the same during combined therapy with chlorothiazide and with hydrochlorothiazide.

SUMMARY

A comparative clinical evaluation of the antihypertensive effects of chlorothiazide and hydrochlorothiazide was made during the course of treatment of 26 edema-free hypertensive patients. Twenty patients were maintained on combined therapy with the ganglionic blocking agent, trimethidinium methosulfate, the six remaining patients being treated only with the thiazide drugs.

Following 16 weeks of chlorothiazide therapy, hydrochlorothiazide was substituted in a dose ratio of 9.3 to 1 and was continued for periods ranging from 12 to 48 weeks. The response to therapy was evaluated by the determination of the blood pressure response, the side effect index and the side effect index ratio, the therapeutic response, the severity index response, and the average daily doses of the medications used during the various treatment periods.

Hydrochlorothiazide produced slightly greater blood pressure reductions than chlorothiazide. There were no significant differences in the side

(Continued on page 1037)

MARK M. MARKS, M.D., *Kansas City*

A New Tranquilaxant, Trancopal ^{R} (Chlormezanone)

In the Practice of Proctology

A report of the use of Trancopal in a series of 143 patients with problems related to muscle spasticity in the pelvis and other parts of the body is presented. Trancopal® used in the series was supplied by the Medical Research Department of Winthrop Laboratories.

Dr. Marks is from the Section on Proctology, Department of Surgery, Menorah Medical Center, Kansas City.

Pelvic muscle spasm is a frequent symptom that comes to the attention of the proctologist. These may be classified into three groups: (1) those whose symptoms follow anorectal operations, (2) those whose muscle spasm is associated with evident anorectal disease and, (3) patients who have subjective symptoms, i.e., demonstrable pelvic muscle spasm on palpation but no evident cause for it.

The need for more consistent and immediate response to treatment of this painful and often disabling complaint warranted a study of a group of 143 such patients.

Evaluation of each patient was made as to symptoms and related causative findings. Whenever possible a complete proctologic examination was made. This consisted of history, digital, anoscopic and procto-sigmoidoscopic examinations.

Background on Trancopal

With the reports of development and use of Trancopal (brand of chlormezanone) as a safe and effective muscle relaxant and tranquilizer by Gesler,[1] Smith,[2] Cohen,[3] Park,[4] Lichtman[5] and others, the application of this drug to patients in this category seemed worthy of trial.

Toxicity studies show that Trancopal produces depressant action on the efferent pathway of the central nervous system. It has little sedative action and is a mild tranquilizer. No peripheral nerve effects have been found. Its empirical formula may be expressed as 2(4-chlorophenyl) 3-methyl-4-metathiazone-1 dioxide. Most of the investigators of this drug state that side effects with it are minimal consisting chiefly of transient

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CHLOROTHIAZIDE—Continued

effects during treatment with the two drugs. No hypokalemia was observed during the study.

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dizziness, dryness of the mouth, nausea and, rarely, skin rash. Such symptoms disappeared rapidly when the medication was stopped and occurred in only 2 per cent of patients treated.

As to advisable dosage, reported various amounts required for maximum results in the treatment of such traumatic injuries as bursitis, rheumatoid arthritis, disk syndrome, and osteoarthritis ran from 100 mg. three times daily to twice that dosage with excellent tolerance and results.

Results of the Present Study

The clinical results with Trancopal as used in our series are listed in table I.

TABLE I

THE USE* AND RESULTS OF TRANCOPAL IN PROCTOLOGIC PATIENTS

Diagnosis	*Number*	*Good*	*Fair*	*Poor*	*Side Effects*
Postoperative anorectal	55	41	10	4	None
Coccygodynia	12	7	3	2	None
Backache	23	15	4	4	None
Levator spasm, non-surgical	32	23	7	2	Two patients
Pelvic pain associated with weather change	8	6	2	0	One patient
Proctalgic fugax	4	3	1	0	None
Myositis	6	5	1	0	None
Osteoporosis	1	0	0	1	None
Whiplash	2	2	0	0	None

* Dosage adjusted to individual requirements—300 to 600 mg. daily.

The most dramatic effect of Trancopal was shown in the postoperative anorectal patients who had undergone hemorrhoidectomy, papillectomy, cryptectomy, operations for fistula in ano or some combination of such procedures. The edema that frequently follows, despite the careful handling of tissue and attempt to traumatize as little as possible, can be of such proportion that a "freezing" or partial fixation of the adjacent musculature occurs. This contributes to the problem of continued urinary retention and difficulty in passage of stool. The combined effects of Trancopal as a muscle relaxant and tranquilizer if given early in the postoperative period was found to prevent the severity and shorten the duration of the muscle contraction that is associated with the edema. The medication is less effective if given when symptoms have persisted over a long period.

Coccygodynia, as a symptom, presented itself in 12 patients. Examination showed unilateral contraction of the ileo and ischio-coccygeus portions of the levator ani muscle with marked traction on the terminal bony segments. When an initial traumatic episode such as falling on ice had been the etiologic factor, displacement of the coccyx was anterior and there was bilateral muscle spasm. The muscle relaxant Trancopal was found most beneficial in the group that had no injury, i.e., no bony displacement. It was beneficial in the others but to a lesser degree.

Backache as a concomitant complaint in patients who come for proctologic care is far more common in the elderly, but it is also a chronic problem in the overweight, in those with poor posture, and in association with a variety of other disorders. Not infrequently the patient is disheartened when surgical repair of a long neglected anorectum brings no relief to an aching back. It was in this group that Trancopal offered considerable relief by alleviating both apprehension as well as musculoskeletal discomfort. The few that did not improve on the medication proved to have orthopedic problems that required special attention.

Levator spasm with or without anorectal disease can be a distressing problem to patient and physician if permanent relief cannot be found. Surgical correction of the anal outlet often brings the expected freedom from further trouble, however, the symptom may persist, requiring further study and treatment with all modalities, digital massage, shortwave or sinusoidal therapy and medication. It was of interest to see the action of Trancopal in these patients when it was added to the physical therapy. With few exceptions the response was good and the patient remained well on taking the medicine at the first sign of muscle spasm.

Pelvic pain during changes in the weather when barometric pressure is altered has long been recognized as a basic physiologic response due to alteration in fluid and cellular content during that period. In a group of eight such patients all obtained relief from the sense of weight and pressure in the pelvis when Trancopal was taken. It was also demonstrable that symptoms of pressure could be averted when weather change was imminent if the medication was taken beforehand.

Proctalgia fugax continues to be a poorly understood muscle spasm either of the terminal gut and/or some portions of the levator muscle sling. Frequently the pain is of such severity that it causes hypotension and shock. It may awaken the sufferer from deep sleep or present itself as a prodromal sense of fullness in the pelvis. Since the time of the sudden onset of excruciating pain is unpredictable four patients who claimed to know when it would occur by this early sense of pelvic pressure were placed on Trancopal to be taken when they suspected an approaching attack. In three they were able to abort the spasm during the past 18 months. The remaining one has had less frequent episodes of exploding pain that is characteristic at that time. The dosage of Trancopal advised was 200 mg. before meals at the onset of a recognizable threat of pain.

Myositis as a symptom in this group of patients was the result of injury by falling or of being restrained while under anesthesia in preparation for surgery. A few were included that complained of the typical vague transient muscle soreness that accompanies the influenzal type of upper respiratory infection. Patients with muscle pain from physical exertion also responded to the relaxing medication. The others had no reaction, even from maximum dosage.

Three additional patients not having a proctologic problem as a primary complaint were given Trancopal. One who also suffered from osteoporosis and whose complaint was pelvic and back pain had no relief from the medication after two weeks of trial. Two, while under postoperative anorectal care, had whiplash injuries in car accidents. Because of their muscle spasm they were placed on Trancopal with highly satisfactory results.

The quantity of the drug prescribed for each patient depended on body weight and severity of symptoms. The initial amount was usually 100 mg. taken before meals. When this was tolerated with little response the quantity was doubled. This was continued until the patient was either symptom free or did not respond after a two week trial.

Side effects were few, even when maximum dosage was used over comparative long periods, i.e., three to eight weeks. Three patients in this study of 143 or 2.09 per cent had some intolerance. It is to be noted that these patients were all women over 40 years of age. The eldest was 60, who complained of levator spasm related to weather change. She became sleepy on 300 mg. but continued obtaining benefit on 200 mg. without disturbance. The other two were younger but of slight body build. Both found it difficult to stay awake on 600 mg. These also tolerated 200 mg. as the total daily dose with good therapeutic effect.

One young woman (age 28 years) in an attempted suicide took approximately 90 tablets of 100 mg. Trancopal. An hour after swallowing the medication she was found vomiting. Emergency treatment consisted of gastric lavage before she was brought to the hospital. Since no medication was obtained in the washing it is difficult to state how much had been absorbed. Her only complaint was that she was "sleepy" but she could easily be aroused to answer questions. Her pulse, blood pressure and respiration remained normal throughout her two day hospital stay. Blood and urine studies were also without significance. She passed the first 12 hours in quiet sleep, after which she was awake, talking naturally, and taking food and fluid. There was no sequelae demonstrable a month after the episode.

SUMMARY AND CONCLUSIONS

Muscle spasm is a frequent accompaniment of patients who come for proctologic care. A group of 143 patients suffering from a variety of problems related to muscle spasticity in the pelvis and other parts of the body were given clinical trials of Trancopal to study its striated muscle relaxant effects.

Trancopal in a trial period of over a year has proven to be safe and effective in the treatment of muscle spasm, seen in the practice of proctology. In a series of 143 patients given Trancopal for a variety of conditions involving striated muscle spasm, 73.4 per cent had a good to excellent effect from the medication. In 19.5 per cent the results were not considered fully adequate and in the remaining 7.1 per cent little or no response was obtained.

EUGENE G. HAMILTON, M.D., ***Clayton***

Frigidity in the Female

An esteemed colleague, recently departed, used to say, "There are no frigid women, there are only clumsy men." Such observations, possibly of a true artist, are not in accord with workers in this field. Those with experience estimate that 40 per cent of women suffer frigidity in some degree.

The importance of the problem can be appreciated by all. The childish attitudes and reactions characteristic of the frigid woman are the common factors leading to divorce, separations and marital infidelity. The children in these homes, even the ones not broken up, are influenced by these negative attitudes, continuing the problem from generation to generation.

This discussion was presented at staff meetings of De Paul Hospital, St. Louis, on December 15, 1960, and January 19, 1961, in two parts.

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"Frigidity" in its most general sense may be defined as the inability to enjoy sexual love to its fullest potentiality.

It may vary in degree, or in type. The most severe degree is represented by the patient with complete genital anesthesia. At the opposite end of the scale is the woman who is poised on the brink of sexual maturity, who has all the normal responses but who will have an orgasm perhaps one time in ten, and at these times it is mild and unsatisfactory. The milder degrees, happily, are frequently cured after a baby, or following minimal therapy.

As to type, frigidity has been classified as follows: the clitoridal, psychic and the all-mother type.

The clitoridal type has sexual response of varying degrees in the clitoris, but none in the vagina. These women are often competitive with men. Orgasms are usually weak and infrequent, limited to the clitoris. These women are often difficult to treat because they often deny the existence of frigidity. They characteristically handle all their fears by denying their existence.

The patient with psychic frigidity seems to run contrary to some of the statements already made. She is able to have a full and complete orgasm almost every time she has intercourse. This woman's frigidity lies in the fact that she is unable to build a deep relationship with any man. Usually she becomes sexually promiscuous. Somewhere during her development, a wedge was driven between her sexuality and her psychologic maturation. She developed sexually, but did not grow in her ability to relate psychologically to anyone in a love relationship. She has a child's mind in a woman's body—as Elizabeth Taylor characterized herself. This type is not to be confused with the nymphomaniac, who is definitely psychotic.

The third type is the opposite of the second. The so-called "all mother type" is a distinct anomaly. Her sexual response is zero. Yet she is happily married, a wonderful mother and devoted to her husband. (The latter is probably somewhat low pressure, sexually also.) This type of frigidity is rare and requires no treatment. The condition causes her no distress nor has it any repercussions on those near to her.

I will not dwell on mechanical factors, or organic disease. These conditions can be easily recognized and treated. While they cause dyspareunia, they do not, strictly speaking, cause frigidity.

To be more specific, frigidity is usually the product of neurosis, and the woman's neurotic behavior is in direct proportion to the degree of her frigidity. Her inadequacy is rooted in her childhood or adolescence, in early fears and misunderstandings largely "forgotten" now. Around these early experiences have crystallized a whole series of personality traits that make life hard for her and, all too frequently, unbearable for those nearest and dearest to her—her husband and children.

Before dealing further with the abnormal it will be helpful to get a clear picture—an ideal picture—of just what the really mature normal female is like.

Condensation from "The Power of Sexual Surrender." Copyright in 1959 by Marie N. Robinson. Reprinted by permission of Doubleday & Company, Inc.

One does not know whether she is tall, short, buxom, blond, brunette, broad shouldered, broad elsewhere, athletic, or the indoor type. These attributes are unimportant.

It is known that she is much "at home" in the world—glad to be a woman with all its duties and responsibilities.

She has an infallible sense in selecting a mate that is almost perfect for her. He may not be perfect in any ultimate sense, but he is perfect for her and as a father for their children.

The good husband adds to her sense of "at homeness" and, springing from her sense of security, is delighted in giving to those she loves. This is the "sine qua non" of the truly feminine character. Psychiatrists have given it a name—"essential feminine altruism."

The finest flower of this altruism blossoms in her joy in giving "the very best of herself" to her husband and children. She never resents the need in herself to give—never considers it a burden or an imposition. She is proud of this giving and delights in it. It stands her in marvelous stead for all of life's demands—and they will be considerable.

She is deeply religious—even without formal training. She has a firm belief in a Creator, and in some form of hereafter. She also believes marriage is a sacrament, binding forever. Biologically, she is the carrier of immortality, of the generations of man. This gives her an appreciation for and affinity to the awesome and creative mysteries of the universe.

Sexually, she almost always reaches a climax during the act of love. It is the kind that starts deep within the vagina and extends to all parts of her body. Although it defies description, no woman who has ever experienced it can doubt it is the real thing. Some may wax poetic speaking of it. Others, less expressive, but still accurate, may compare it to going over Niagara Falls in a barrel.

She is quite a show-off and likes sexual compliments from her husband. She is not shy. She would not demure at initiating love with her husband, although she will immediately change her amorous direction if she finds her husband too tired or too preoccupied without feeling the least bit rejected.

She realizes a woman can make love anytime, but a man only when he is ready. She is always ready to make love when her husband is ready (barring sickness, or certain times in pregnancy). Her deep altruism makes her extremely sensitive to his moods, and she will not find it in herself to treat him as if he were a robot, become angry or feel rejected if, when the button is pushed, he does not respond. She will die a thousand deaths rather than make him feel sexually inadequate.

Her eternal acquiescence never lets her in for a painful sexual experience. If she fails to reach an orgasm once in a hundred times, she takes pleasure in the very obvious pleasure she is able to give her husband.

She not only takes the lead from her husband about whether they are going to make love—the kind of love-making is also usually his decision and, in pure delight, she follows him completely. Whether he feels lusty, gentle and tender, experimental or passive, she picks up the mood and responds delightedly.

Despite her profound wantonness with her husband, she has no promiscuous urges whatever. She realistically finds other men attractive or unattractive, but she neither desires them nor has any phantasies of a sexual nature about them.

She is never tempted to indulge in self-masturbation—at least not after one or two tasteless and pointless experiments during her first absence from her husband. To her sexuality has no meaning whatsoever if there is not mutuality—if it is not shared.

Her altruism does not lead her to martyrdom. In fact, our heroine is quite self-centered. She is content with all the aspects of her body, of her female anatomy that gives her so much pleasure. This pride and self love is reflected in her outward appearance. She is clean as a cat and neat as a pin. She enjoys dressing well, and is well aware of the things that bring out her special attractiveness. She is so confident of herself that she does not feel a production requiring several hours in front of a mirror necessary. Regardless of her physical attributes, whatever she has she enjoys.

Her self-love has the important attribute of being detachable. She can easily project nearly all of it onto her children or husband, and take as much joy in their joys and accomplishments as she would from her own.

Her detachable self-love and her need to give unrestrainedly are the two chief components of her maternal instinct. The fulfillment of it is the most important function of her life. It colors, deepens and enriches her sexual life. Her unconscious phantasy with every intercourse is that he might make her with child. Her psychologic and biologic gratitude to him for this richest of all potential gifts is boundless. Childbirth holds no terrors for her. She sails through it proudly, like a clipper ship made especially for such weather. She wants to nurse her child and usually succeeds.

Now that she is married, a career is of secondary importance. She will follow it if it is necessary for the family, but it can no longer be the center of her life. Achieving her biologic destiny with its associated joy and satisfaction makes all other personal achievements pale for her.

As one could surmise, this paragon ages gracefully. She knows just when to give up her children, let them stand on their own, and learn the difficulties of freedom. In doing this without fuss she wins her children's regard forever. She reaches her twilight years with a deep sense of fulfillment. She is convinced of immortality for she has served it with her whole being. She looks at death totally unafraid, wondering, perhaps, what the Creator, who has made her life such a marvel, is like on an even closer view.

If not being frigid is so wonderful, why do so many women hold on to this problem? Have millions of women always been this way?

To answer these questions it is necessary that one understand a little history. For even though frigidity is a psychologic problem within the individual, there are also certain destructive sociologic events that have happened to women in the last two hundred years. If one understands them, one will begin to get the overall picture of how she has lost her direction, her sense of self, and what she must do to find them again.

It is well to begin by picturing what home was like until the beginning of the 19th Century. The home was the center of all life—economic, social, educational and religious. Everything that was used was made in the home. There were no stores, even if one wanted to buy anything. A man was his own blacksmith, architect and carpenter.

Women's place in this early home was right in the center. Her lot was hard, but she was an equal partner with her husband in the many duties and responsibilities. Children lightened her labors as soon as they became old enough. Public schools were unheard of, so she provided their education, not only in the three R's, but in a multitude of crafts, arts and technics required to run a home.

Her reward for all this was the knowledge that she was needed, loved and held in the highest esteem by the entire family. Love, home and work were a unified and profoundly satisfying experience on all levels. As a woman she was profoundly needed. She was reared to respond to this need, so she had no occasion to question her worth or her abilities.

Then came an apparently unrelated event that turned her world upside down with repercussions extending to the present time. Toward the end of the 18th century, Isaac Watt invented the steam engine that ushered in the industrial revolution. Over the decades that followed, the husband was taken out of the home to the factory or store to earn a living. The children were taken out of the home to be educated in schools. Manufactured goods began to render home-making skills and handicrafts unnecessary. In time women awakened to find themselves dispossessed. Looking about in confused rage they thought they spied the culprit. He was none other than the loving husband with whom they had once served so happily.

Her first reaction was expressed by the Victorianism of the 19th Century, during which she simply quenched all her sexual fires completely. She was so successful that medical opinion of the time considered any exhibition of sexual warmth by a woman as dangerous and pathologic.

A second powerful sociologic force, still exerting an enormous influence, was initiated as the feminist movement in 1792 by Mary Wollstonecraft, just 30 years after the invention of the steam engine. What was this program of the feminists?

Mary Wollstonecraft enunciated it in its entirety in her book, "A Vindication of the Rights of Women." The movement has never deviated from her original demands. She held that men and women were in all fundamental characteristics identical, and that women, therefore, should receive the same education as men, be governed by the same moral standards, do the same work and have identical political rights and duties. Women were to be treated exactly the same as men in every detail of living, and the same demands were to be made on them.

The appeal of this program was enormous. Nineteenth century women felt, "Ah, if we could only achieve this then we would be happy once again." The sad fact is, now the entire program has been realized and modern women, having reaped the benefits of it in full, are more confused, perhaps even unhappier, than ever.

This is not to say that all aspects of the movement were bad, for they helped correct many injustices and dislocations in economic life. But insofar as it pitted woman against the male, and advised her to masculinize herself, or abandon her feminine nature, it was dreadfully neurotic. They pitted themselves against the institution of marriage and encouraged sexual promiscuity. Maternity, so deeply rooted in the feminine biology, was denounced as a trap by which men sought to keep women enslaved.

This, then, is the heritage of women today—the Victorian concept on the one hand, that she is and should be nonsexual and frigid by natural law; from the Feminists, on the other hand, that man is woman's natural enemy—that she should drop her feminity altogether, oppose man, supersede him, become him. One can easily appreciate the effect this had on marital life, but the effect on the children was alarming.

This is what they learned at their mother's knee. Shame about their bodies, shame about menstruation, and disgust with it, for it is the hallmark of womanhood; fear of pregnancy and childbirth, punishment for early and natural sexual feelings and experimentation, destruction and depreciation of the father as an ideal image for the child to love and emulate. In general, women learned early and well to loathe their womanhood in all of its important manifestations. This is why psychiatrist Dr. Farnham (a woman herself) states, "The most precise expression of unhappiness is neurosis. The basis for most of this unhappiness is laid in the childhood home. The principal instruments of their creation are women."

Now to discuss why women can become frigid. In the first place, the male orgasm is a biologic necessity for the preservation of the species. For the female it is a luxury. She can be as cold as ice and still discharge her biologic duty of maternity.

To gratify the maternal instinct the woman has to be willing and ready to die for the safety and sake of her child. She must be ready to reverse the law of self-preservation as it applies to her own person.

She must be ever ready to place the child and its needs before herself. If a young woman cannot accept this aspect of her destiny, she will be deeply defeated in life. If motherhood is presented to her in an improper way, she will react with acute anxiety and fear, rather than joyful anticipation.

Her ability to have an orgasm, her deepest form of relatedness to man, is rather lightly rooted in biologic soil. This ability is tightly interwoven with her psychologic experiences at every stage of her development. The quickest and most effective way to force her into frigidity is to teach her to be frightened of the maternal aspects of her personality.

All have seen and admired the normal mature woman in action. What are the essential steps by which she arrives at this degree of perfection? These phases of development have been under the closest scientific scrutiny for the last several decades. The methods of checking range from direct observation at all ages, to the recovery of childhood memories through hypnoanalysis, and the direct reports from children.

There are two overall stages of biologic and psychologic development that all women go through. (Incidentally, it must be borne in mind that attention is confined only to those phases of development that relate to her sexuality.) The first stage lasts from birth to about 10 years of age. This in turn is divided into the period of infancy, comprising the first five years, and the latency period occupying the second five years.

It may startle some to learn that during the infantile period the little creature is heavily endowed with strong sexual feelings. The sexual feelings are centered on the genitals from the outset. The little girl masturbates by manipulation of her clitoris. She has no awareness of her vagina as a sensual area. The strong sensual feelings during the second and third years may set the stage for her later sexual development.

During the first three years the little girl is attached to the mother as the source of all her security. Around 3 years the little girl becomes aware of her growing attachment to her father. His attentions to her stimulate her whole being, and her sensuality becomes increasingly attached to him. As she becomes a bit more aware of reality she senses, however vaguely, that another woman has prior claim on her first man. She now begins to develop hostile feelings toward her mother. Ultimately, she will give up her father as the center of erotic interest, but he will remain in her unconscious life as the model of all she wants from the male in her life. This first five year period ends with a remarkable psychologic event: the early infantile sexuality goes completely underground. She "forgets" that she ever went through such sensual experiences.

The years from 5 to 10 have been called the latency period. It is marked by tremendous physical and mental growth. Her masturbation normally stops. She becomes interested in everything that will give her a chance to advance physically and there is little to distinguish her from a boy the same age. She grows mentally, and learns to form personal relationships free from the stresses and strains of infantile sexuality.

There is a close relationship to the parents, especially the father. However, there are now no conscious sexual feelings attached to him. She admires and values him above all and desires his approval. Most fathers instinctively give their daughters a great deal of love and reassurance during this phase, and the child basks in it as a flower in the sun. She strives to do the things that will please him, make him notice her, make him love her. She assiduously studies his responses and in this way gains her first real experience with the all-important feminine need to "please her man." The pleasures she derives are the precursors of the rewards she will later prize so highly when bestowed on her by a loving husband. If the father seriously fails in his role he can do irreparable harm to the growing girl.

The mother's role continues to be important and emerges as a model to imitate. The little girl reasons thus to herself, "She, after all, got the man I prize most highly. Therefore she must have something very desirable. Therefore, I'll imitate it."

The second stage of development starts at about age 10 and ends with complete psychologic and biologic maturation. It is often divided into two phases—puberty and adolescence.

Puberty ushers in marked glandular changes and a return of sexual feelings. She begins to react to them with some anxiety. She may once again masturbate clitorally, although now with guilt feelings and apprehension. The apprehension may be thought of as fully justified. Her sexuality is going to lead her to motherhood, and this in turn means that she is going to face the dangers of pregnancy and childbirth. She is going to suspend the law of self-preservation as it applies to her own person. The little girl knows this with her body and mind, no matter how prudishly she is raised.

The new changes in her cause apprehension, but they also cause feelings of joy, excitement and intense curiosity. Throughout puberty she will swing between these two states of mind. She will hate her developing breasts, the hair growing under her arms and around her genitalia. At other moments she will be rapturous about the same changes.

At this point she withdraws from her parents to a large extent. She will flutter between strong feelings of dependency and rebellion—i.e., rebellion against the desire to be a little girl with them again. If this period is successful, she emerges with the feeling she has the potential, not the actuality, of freedom from her parents.

At some point during this period she will become dramatically attached to a girl friend. She uses this friend to buttress her feelings of separateness, of independence from her parents. The two share secrets and pool information about sex, boys, women and childbirth. The girl friend may be one to three years older, and the younger one's worship is clearly a substitute for her feelings toward her own mother. If the older girl is not too precocious sexually, and is morally good, nothing but good can come from the relationship.

Gradually puberty merges into adolescence—often called the "daydream stage." It is a period of almost waking dreams on the part of the young lady. Her head is filled with tremendous plans for herself, usually of a highly maternal or altruistic nature. She will become a great doctor and serve suffering humanity in darkest Africa, or she will become a lawyer and defend the poor free of charge; or she will become a nurse, and in a future war will tend the wounded boys at the front under fire that would daunt a lesser creature. She has scores of great loves with boys or men whom she considers wonderful—all in her head. While she ripens on the vine, the role she plays in her daydreams are, in most cases, not achievable. They allow her, by their very impossibility, to have her cake and eat it too.

The dream of young love is lovely, and it readies the dreamer for real love. Woman will always be a romantic dreamer, a weaver of inner tapestries of thought that give her whole personality its richness and flavor.

If the girl's development is normal, she puts sufficiently high value on herself that she will not have sexual intercourse until she actually falls in love seriously. As mentioned before, Nature gives her an almost unerring instinct for the "right man"—one who will cherish her and their children.

It is the man who ultimately wakens the sleeping beauty sexually. Until she is ready for intercourse and all that it implies, she is conscious of no particularly urgent vaginal sensations of a sexual nature. The man awakens these for the first time in the act of love.

These are the stages the normal woman goes through to attain true sexual and psychologic maturity. What are some of the impediments along the way that can mar her progress?

In the first, or infantile stage of development, the greatest danger lies in ignorance on the part of the parents. They do not know of the young child's sexuality—or do not believe it. Many parents slap the infant's hands or systematically remove them when they see her playing with herself. Others, when the child learns to speak, will scold her for such activities and spank her if they persist. In this all-important area she will react violently to punishment or even verbal warnings. Often she will not only attempt to prevent her own masturbatory activity, but will try to repress the whole of her sexual nature to keep her mother's love. She may be so successful as to kill all her natural impulses in the bud.

Another danger in this period may come from an exorbitant amount of overt love from the father. His caresses may overstimulate her and cause an overfixation on the father with consequent overload of guilt feelings that can lead to total frigidity in later life.

During the latency period failure of the relationship with her father is the chief danger. She has transferred many of her feelings of love and dependency to him. Forever after he will be the model male in her life, though she will seek this ideal in other men. For the present she worships him and his approval means more to her than anything else in the world.

If he is disapproving and critical, she may develop feelings of inferiority. She can come to feel that men are impossible to please and she can thus become fearful of them, feeling that if they find out her true nature they will disapprove. Her feelings of inferiority extend to her sexual drive which she is able to repress, as if it were discreditable, like the rest of her personality.

If the father has a closer identification with his sons, she may seek to become what he admires, having quickly detected his preference for the male. She often thus cultivates male characteristics and pursuits, and devalues totally all those typically feminine goals she must one day achieve if she is to be a true woman.

If the father implants male goals during the latency period when there is little difference between boys and girls, he has a ready audience. She may even yearn to become a boy to earn her father's esteem. Later, although hidden and disguised, this wish can be at the root of much of her sexual problems with men, causing her to be neurotically competitive with them and to reject her own female role as unworthy.

If, by any means, she is taught that the male role is superior, then she will be highly motivated to reject her femininity and, almost literally, try to be a boy. It is frequently exactly this that occurs when a woman's fear and rejection of femininity results in an inability to respond vaginally to sexual intercourse. In a curious and of course unconscious manner, she may hold on to the sensual responses of her clitoris as if she had a small penis, but be unable to allow the sensual feelings to be experienced within the vagina.

If the mother has rejection of her own femininity, feeling the role of wife and mother is a degraded one, she can pass these feelings along to her daughter without a word. The child sees it in her mother's reactions to her father every day, hears it in the resigned and hopeless attitude with which she may face her life.

If the chum in puberty is sexually precocious, sexual relationships may occur producing trauma of such severity that she may withdraw from the opposite sex entirely. Or it may lead her to believe that she has reached her majority and cause her to act out this joyless and premature experience over and over with many different members of the opposite sex.

Another danger of puberty and adolescence is that the parents will be overly strict interpreting the move toward independence as a danger to her. The child's interpreting of their watchfulness is: "You will never be independent of us, never have a life of your own. Why don't you give up trying?" In a gesture of defiance she may do something that will actually injure her.

Equally seriously affected if not more so is the girl who feels extremely rebellious but submits to over zealous parental authority out of fear. They usually pull back from personality enriching dreams of adolescence. This causes them to remain on the threshold of womanhood, lost in an emotional dependency belonging to an earlier phase of development.

This is not to advocate a laissez-faire attitude. Every young girl needs to feel the force of the parents' moral feelings; they give her guidance and a feeling of security. She will, however, generally react more normally and healthfully if the moral attitudes are expressed and interpreted rather than laid down as ukases.

These are the stages of development that lead to maturity and the pitfalls she may encounter along the way. All physicians have seen the unhappiness in everyday life, in and out of practice, caused by the neurotic attitudes of the frigid woman.

We are now prepared to examine the constructive steps these unfortunate individuals must take to win their freedom—to attain true womanhood.

This is the background information necessary for insight into the nature of frigidity. It points out that frigidity in the female is a manifestation of neurosis, that the neurosis, in turn, is due to childhood fears, errors in understanding and interpretation. With this insight we are now ready to examine the means by which frigidity can be resolved.

Those who do not know love tend to depreciate it. The frigid woman must be sufficiently motivated to enable her to resolve her problem. The following concepts must be accepted by her if she is to reach her goal.

Probably no word is bandied about more than the word "love." In its broadest sense this God-given characteristic is the most important one that man has. Without it there could be no brotherhood among men, and the very concept of civilization, as it is known, would be inconceivable. A terrible loneliness would be each man's lot.

In its deepest sense love means union. On the family and community level it is the most basic and profound urge, and its power for good is without limit.

In love one makes the good of the partner (whether he be child, or neighbor or sweetheart) as important as his own good. Man learns through love that he is not alone, not condemned to the pain and anxiety he experiences when he has nobody with him whom he can share his mind, his heart, his body.

The concept of this happy union is most clearly seen in the love between men and women. This merging on the physical plane, where two become one flesh, in addition to the joy and comfort it brings, can become a creative act. On every plane the profound result of the union which always characterizes love is productivity, creation.

The merging that occurs in psychologic love is also essentially creative. Each lover is able to come closer and closer to his true self. All who have ever loved know of this inward blossoming, this fecundation by the love of the other. In work, in play, in all the inner and outer activities of life the individual becomes far more vital and more productive than before.

Through the mersion of love the uniqueness and individuality of the other person becomes precious, and hence all effort is made to guard the special qualities of the beloved. In love one never encounters a man trampling on his wife's rights and needs or a woman competing with her husband. The value of the other as he is, and as he can grow to be, becomes the highest value in life.

The woman who places such high value upon her loved one, makes the understanding of him one of her most important activities. And this understanding furthers understanding, so the process is a dynamic one. By gaining such knowledge she is ultimately able to go to the very root of his personality, making an ever deeper merging with him possible. Such understanding implies, of course, a great sensitivity to all of his reactions. It makes her, too, inquire urgently (and creatively) into herself, so that no blocks to their deep psychologic communion can develop.

One can never win through to real love if one minimizes it. The frigid woman must realize this and never give up her struggle. Indeed a complete awareness of how important love is can be in itself a big step along the way to achieving the ability to love and be loved.

In summary then, one can say that the woman who loves has the ability to see the other person as he is and to esteem him above everything else for his individual quality, indeed to love him (and so want to merge with him) for it.

On the other hand, in the frigid woman one finds just the opposite. One finds that she never sees the man she wants to love as he is. His individual and essential quality is entirely unknown to her and unknowable by her. He is a series of projections from her past. He is a composite of the fears, errors, the misunderstandings of her infancy and childhood. The real union of love is impossible with this quasi monster she has conjured up.

Thus one can see that the major task of the frigid woman is to rid herself of the projections she makes upon mankind in general and upon her own man in particular. This is step one.

When this is done there is another step she must take. From the description of love, there is implied a great security within one's self, an acceptance of one's own uniqueness and essential femininity.

But the frigid woman fears and rejects femininity, feeling it to be a dangerous trap. She must learn to alter this basic and negative attitude entirely. She must see how childish and false, how utterly self-depriving this view of womanhood is and give it up.

Let us start with step one and see how the frigid woman can gain insight into her faulty attitudes toward her husband, and mankind in general.

She should select a time each day when she can be alone, and undisturbed for ten minutes to an hour. She should start on the simplest level possible and give her negative emotions full expression; experience them to the fullest. At first no strong negative feelings may come up, but if she persists she is bound to succeed.

The matter of her husband's bathroom habits is often a fertile field to begin working. Perhaps he leaves his razor out, the soap in the basin, and his pajamas on the floor. If she allows her feelings full rein they will probably run something like this. "He desires to humiliate me. He thinks I have nothing to do but pick up after him and wait on him hand and foot!" These feelings will usually in short order lead to her feelings about men in general. "They consider themselves superior to women, a race apart. If one resists they will use their superior physical strength against her." Such attitudes constitute the very bricks and mortar of her frigidity.

She should in turn explore her feelings about all the petty ways her husband annoys her. She will come to observe how these negative emotions quickly move to broad generalizations about men.

There are two reasons the frigid woman has hidden these feelings from her conscious mind. The first is that, because of their very intensity, they were felt in the beginning to be overwhelming. Over the years she has learned to hide them, to fix them on trifles in order to minimize them, or to deny that they exist at all. By letting them into awareness she will learn that they are not overwhelming, but can be conquered.

The second reason her feelings about her husband (and men in general) have been repressed is that she believes her feelings are actually based on facts. She must be assured that no matter how positive she may be that her feelings express reality, such is simply not the case. They are only feelings, not facts. She must then be remorseless with herself and search for and exhume every last vestige of hostile and irrational emotion. If she is honest with herself she can feel when important attitudes still lie hidden within.

These attitudes and feelings can do harm only when they are repressed. When they are brought into daylight, and exposed to judgement, reason and education, they are seen to be fragile bubbles of easily exploded ignorance.

Having dissipated those negative feelings she is now in a position to explore into and care about the uniqueness of her mate which was mentioned as a chief prerequisite for love.

Another characteristic of frigid women is that they frequently experience powerful phantasies which hamper cure of their frigidity and psychologic maturation. They are left over from adolescence and usually spring from a desire to become an actress, a dancer or a concert artist. Whatever it may be, the impossibility of attainment is blithely ignored by the daydreamer. It is amazing how powerful and persistent these phantasies can be. Their power lies in the fact that the dreamer feels they are still realizable or could have been achieved had her husband and family not prevented it.

Some frigid women in their 40's and 50's still believe that some day (tomorrow, perhaps next year, certainly) they will go to acting school and soon obtain leading roles in Broadway plays, or resume their piano lessons and become famous concert artists.

Such phantasies derive their power from the fact that, unable to deal with reality, she uses them to protect her from a feeling of inferiority.

The woman should employ the same process as she employed in eradicating her negative feelings toward her husband. She should let the daydream have full sway, noting its grandiose nature and all its fascinating features. She should then try to imagine what life would be like if her phantasies were never realized. If the thought depresses her, she can then realize what an important crutch it has been in her emotional life. Over the days and weeks she must wean herself away from dependence upon the narcotic effects of her daydreams. She will come to realize that life can be worthwhile even without them. It will be helpful if she will examine them in the cold light of reason and see just how ridiculous and impossible they are.

These two steps are the most difficult: the "feeling through" of erroneous and immature concepts about her husband and the male sex generally, and bursting the bubbles of her phantasies. When these steps are successfully accomplished, recovery follows more easily and naturally as new knowledge is acquired.

The next helpful step for her is to learn what the male sex is really like. Her childish view has not permitted her to see clearly up to now. The one characteristic that distinguishes the male, and differentiates him from the female, is his aggressiveness. One sees this most clearly in all aspects of sexual love. An analogy is seen in a primordial biologic form where the motile sperm searches out the passive ova. These attributes also exist on the psychologic plane.

She should be taught that the male's aggressiveness is directed primarily against the outside world. He enjoys contact sports. He seeks to surpass others in his chosen sphere of activity. He applies his aggressiveness toward the acquisition of knowledge in science, philosophy, or in struggling for a victory in the jungles of business.

Woman, on the other hand, tends to center her interests inwardly, directing a relatively minor portion of her activities in outward aggressive action.

Psychologically this is also true. She is able to come up with some amazing intuitive ability in understanding other people by consulting an inner source.

There are, of course, no pure types. Men have a modicum of passivity in varying degree, and women are endowed with some aggressiveness.

Since the male characteristics are so diametrically opposite those of the female, the frigid woman will interpret them as lack of interest, weakness, cruelty, rejection or exploitation. She will find these differences cause for further estrangement, fear and hostility.

A few examples from everyday life may be used to clarify these facts to her.

To the woman, the nest is of central interest. She takes pride in it, lavishes upon it a considerable, sometimes excessive, amount of care. She makes it clean and neat and wants it to stay that way.

It is easy for her to misunderstand the actions of a husband preoccupied with matters of the outside world. He may take the cleanliness and neatness for granted and proceed to dirty up the sinks, splash the walls and floor, leave his clothes lying around and neglect to use the ashtray. While such traits deserve no commendation—the frigid woman will use them to indicate his indifference to her. He may fail to notice even major items of new furnishings. A request that he make minor electrical repairs or perform household duties may elicit ill concealed annoyance. Instead of interpreting this behavior as simply male, she will see it as indifference to her and the family. The home, of course, is her business, and it might be helpful for her to consider how long she could be fascinated by the details of her husband's business life.

Another characteristic, often misconstrued, is the man's tendency to be more aggressive socially. His inclination to seek out and form all types of new social contacts, while the wife is content to go out less and enjoy a few close friends, can be interpreted as restlessness and dissatisfaction with her.

The husband may become embroiled in a heated discussion at some social function. He may raise his voice and really argue to win. The wife, who likes everything calm and serene, can view this as being rude and boorish. She is sure to confront him with it later, decrying his cock-of-the-walk actions. She does not realize she is merely confronting him with his masculinity.

A humiliating fact is that the male has a lower threshold to pain and fatigue than the female. The woman may sustain minor burns, cuts or illness, and after perfunctory first aid go about her duties. The man, with the same infirmity, may be totally incapacitated. Because of the difference in pain threshold and resistance to fatigue the male tends to pamper himself when he has a cold, headache or minor illness. He may aggravate matters by adopting his wife's disparaging view of her minor illness. This becomes a rich vein for her to work, not understanding the difference in males, she taunts him for his "weakness," and smolders at his indifference when she feels indisposed.

But sex remains the most abundant source of resentment due to misunderstanding. Unlike the female, the male is stimulated erotically by a multitude of sights, sounds and odors. The wife may excite her husband if she appears vibrant, or pale and wan. Not realizing the many sources of his erotic stimulation she may view his ardor as unselective and impersonal. For that reason she considers his aggression as an affront to her. In the act itself the violent thrusting activity does not elicit pleasure and joy as it should, but seems an invasion, a selfish utilization, an act of hostility.

She could not be further from the truth. The husband by his action is showing his love in his particular way. He seeks to lose his isolation and merge with her. In misunderstanding this she misunderstands all.

Most of her negative feelings have their basis in his aggression. Since she does not understand or accept her feminine nature, she considers the aggression as opposed to her. She constantly contrasts the male and female characteristics to her own detriment.

She must be made to feel that his aggression constitutes one of her greatest assets, since it is employed in her behalf to carve out a livelihood for her and their family. The responsibility of this task is actually quite an awesome one that he has assumed willingly. He has many anxious moments which he does not relate because he wants to spare her the anxiety. She is indeed fortunate to be freed of his responsibility. She can, if she will, begin to see how utterly worthy he is of her admiration and love.

As a woman revises her attitudes and her thinking, certain profound changes take place within her. During this time it is well for her to continue her sessions with herself in order to observe the process that unfolds.

This process tends to follow a certain pattern. An inner restlessness begins to subside—to a point where she is amazed at just how restless she has been. She begins to experience for the first time the truly feminine trait of spiritual tranquility. This occurs when she lets down and begins to rely on her husband's strength, no longer feeling the need to oppose it or fear it. This tranquility emanates to all about her to the special benefit of the children, who are greatly strengthened.

As this serenity takes over she begins to realize what a wonderful thing womanhood is. She becomes aware of what a miraculous thing she is able to perform in the act of childbirth.

Contrast this with her former attitude. She dreaded pregnancy, considering it as a curse—a terrible burden. It made her sick mentally and physically to feel the victim of man's selfish lust, trapped by the method he used to keep her subject to him.

When she learns to accept her destiny, she realizes how fortunate she is to be a woman. Far from envying man, she wonders how she could ever have considered her state inferior. Holding the keys to her husband's desire for immortality through his children, she realizes what tremendous power she controls. She can deny him this or make his life (and hers) miserable while granting it. Along with this feeling of power she develops a deep sense of humility.

Her power and humility give her a confidence whereby it is no longer necessary for her to be contentious, to win every argument. She seeks agreement, unity, and her husband's happiness and peace of mind above all things. Having done this she has tapped the greatest psychologic joy of woman—that of giving. She now begins to give unrestrainedly, no longer fearing that she is going to be exploited.

One can even see the effects of these inner changes. Tense features relax, the thin-lipped mouth softens, the appearance of her entire body becomes more feminine. Many typical psychomatic complaints disappear.

The rewards she reaps are enormous. She has cast the bread of love upon the waters and it has returned 100 fold. She receives it from a delighted husband, children and friends.

Once psychologic surrender is complete, orgasm follows as a natural consequence. But it can only come when the last remnant of resentment and hostility has been removed.

Women state that in addition to faith in one's partner and readiness to surrender, there must be sensual eagerness to surrender. In the orgasm the excitement comes from the act of surrender. They assert a tremendous surging physical ecstasy in the yielding itself, in the feeling of being a passive instrument of another person, of being supinely stretched out beneath him, taken up will-lessly by his passion as leaves are swept up before a wind.

There can be no crossed fingers, no reservation about such yielding. The orgasm will follow naturally and cannot be forced or sought as an end in itself. To do so will end in frustration.

The frigid woman seeks to do just that. She does not trust her husband or herself, hence she has the need to feel that the situation is in control at all times. Actually, to attain her goal she has to be "out of control"—willfully, delightedly, desire to be entirely so.

One is doomed to failure if he seeks to help the woman attain orgasm by a mechanical approach, independent of the psychologic changes described. Without psychologic reorientation scores of various positions may be used with equal futility. It is naive to instruct the husband that if he strokes his wife Y number of times in X places success is assured.

The lady must be instructed not to indulge in obsessive scrutiny of all her sensations during intercourse, wondering if she is getting the right sensations. The frigid woman, trying to keep things in control, does just that with frustrating results.

The patient must rather be instructed to put the matter of orgasm out of her mind entirely—assuring her it will come in its own time. It is the result of a natural growth. Gradually her new feeling of tenderness and concern for her husband will become a part of the meaning of her sexual embrace. She sees and feels the pleasure her sexual thawing brings him, and in turn his increased pleasure gives her more pleasure. With his pleasure in mind she now seeks out more and more those things that please him, and her exploration leads invarably to the discovery that what pleases him most, outside his own sensations, is her pleasure. This mutual spiraling of feeling ultimately leads her to decide to give him the greatest psychologic pleasure of all, her total surrender to the delights he can bring her.

The patient should be forewarned, however, that there is no straight gradient from frigidity to feminine maturity. As the woman allows herself to experience more pleasure in the sexual embrace something in her unconscious causes her to draw back.

On the basis of what has already been stated, this is understandable. Frigidity was based on childhood fears, misconceptions and guilt feelings, and as one's sensuality returns these buried fears reassert themselves.

It is important to know that this will occur and to understand its significance. Typically, the fear is not consciously connected to the sexual event. The woman, after experiencing in herself a new tenderness and response, may once again become quarrelsome and hypercritical of her husband. After her first true orgasm the immediate reaction may be one of great relief. But then she may revert to her old self with such an excess of negative attitudes and reactions as to imperil the matrimonial bark itself. She panics because all the defenses against feminine sensuality, built up since childhood, have been shattered.

Now, with orgasm, she feels exposed, guilty, naked to her imaginary enemy. She cannot admit the irrational nature of her unconscious fear, even to herself, so she represses it and creates an exterior diversion. Real trouble is always an excellent defense against insight.

Real guidance at this time is needed, for in her flight from femininity, she may take off in the wrong direction—even thinking seriously of divorce, or develop somatic difficulties.

If this occurs, is not the cure worse than the malady? If all concerned are forewarned, the storms will pass, and each succeeding orgasm will be followed by a lesser regression until all the neurotic defenses are leveled to the ground.

The various types of frigidity may require specific types of treatment, including psychiatric help for the totally frigid woman. Detailing these is outside the scope of this paper.

Most of this discussion is of the wife, neglecting the husband. This is fitting since most of the problems lie in the wife's sphere. However, it is important that he understand the psychologic nature of the problem, as is applies to the wife. He should also realize that he has been the recipient of most of the hostility his wife feels against men in general. He has lived with the endless complaints against household chores and the inability to handle even trivial duties, with ease and grace.

He has experienced a tremendous amount of emotional frustration. The frigid woman is incapable of any interpersonal warmth. There is no point in belaboring the rather boring and bleak experiences he has had with an unresponding sexual partner.

So he, too, has erected some psychologic defenses in order to retain his sanity and a modicum of efficiency. Chief among these is a general withdrawal. In short, he may just cease to give a damn about anything domestic. He is equally indifferent to his wife's attacks on him or her complaints. His withdrawal may even reach the stage of impotence with his wife.

He may in his withdrawal from home life organize his social life around an athletic club, the bars, or other external activity, spending as much time at it as possible. Such defenses may enable him to keep the marriage together since each one bores the other as little as possible.

As the wife begins to work through her problems, if the husband is to help her he must examine his own attitudes with great courage, candor and completeness. The man may be understandably reluctant to abandon the adjustments he has made. He may be motivated to do so by several emotions. He may be able to summon up anger when he compares the picture of marriage he had when he first fell in love with the stale defeated existence he now leads. The anger should be directed toward himself for his passive acceptance and easy adjustment to a defeated life. Such anger can give him resolution to accomplish his real desires. He can further motivate himself by contemplating the magnificent and exciting qualities of true womanhood. If he can clarify exactly what he wants and then develop the patience to wait for it he will be most thoroughly rewarded. He must be forewarned of her pullbacks after a certain degree of progress. He must be assured at these times she has not pulled back for good. His solicitude, and the reassurance she gets from the knowledge of his love, can be potent factors in her final cure.

In addition to changing his defensive attitude there are other ways the husband may help. The first is extreme sensitivity to any changes in her manner relating to him. As she dares to be soft and warm, any recognition and approval she receives will do wonders.

In his effort to be sensitively attentive to his wife's changing reactions he must avoid insincerity or artificiality. Women are deeply intuitive about such things and are quick to see through them to their detriment. If the husband cannot summon up sincere feelings of love and affection, he should seriously examine his own inner feelings, possibly with outside help.

A standing order with the florist to send flowers to the wife weekly is an example of what is meant and is to be avoided. Or, if the wife mentions she would like occasionally to get away from the household activities, she will resent it if she is suddenly dragged out almost nightly to nightclubs, theaters and friends in a flurry of parties that would exhaust Elsa Maxwell. Wives rightly interpret such actions as those of hostility rather than love. The husband should do what he inwardly feels but refrain from doing what he does not feel.

Both husband and wife must learn to share their deeper thoughts, problems and feelings with each other. These need not be in the form of confessions that would hurt the other. A discussion of her husband's hopes, plans, fears and loneliness can be deeply moving to a wife. She will be helped to recognize the importance of woman's role, and it will dissipate misconceptions she held about men being "powers" without worries or fears.

Over the years the sexual act has usually become an extremely self-conscious one. The woman conditioned by her sense of failure usually exerts hawk-like attention to every sensation she has or does not have. This attention may be the result of false hopes she has had after reading some mechanistic approach whereby she thinks that if she adopts the right position, makes the right movements, or contracts the right muscles at the right time, success will be hers. The glowing reports of the joys of mutuality are a mockery when frigidity is present. Since one's body can only feel its own raptures they should each view sexual sensation as purely selfish. The wife may be relieved if the husband will announce that she is to abandon her concern with orgasm until it happens—she will then be able to obtain psychologic pleasure from his "selfish" enjoyment—the feminine pleasure of giving pleasure—instead of neurotically fixing on her own sensations.

Because it is generally recognized that woman may reach a climax more slowly than the male, the matter of foreplay has received much attention. In women with a frigidity problem this should be considered a psychologic rather than physical matter. Romantic dreams prepared the young girl for real love. The dream of romance never leaves a woman. Foreplay is most successful when it arouses those dormant feelings. Such feelings are aroused when she feels her husband's entire emotion is fixed on her tenderly and lovingly. She feels romantic when all the other distractions of life are for the moment relinquished. In such a situation she dares to relax and to concentrate on her deep belief that love is certainly important, the thing that gives life its meaning and beauty. Every woman, deep in her heart, wishes to give all for love. To woo a woman successfully her husband must believe her dream and become a passionate sharer in it.

What things will remove a couple for a while from the highly goal-centered activities of daily life? Stepping out to a luxurious evening; putting on an evening gown can separate her from her housekeeping, penny-pinching view of herself. The sight of her husband in a tuxedo can fill her romantic cup to the brim. A few champagnes and dancing to a good orchestra and the magic is complete. Picnics too, without the children along, can engender deeply romantic feelings in a wife. The whole thing should be carried off with a little style. A good wine is a must and the man should select in advance a very private spot.

Some women have broken the sexual ice on ocean cruises which seem to present the circumstance par excellence. The husband who can afford it should add such cruises to his loving calculations.

Husbands and wives would do well to arrange some vacation time alone together. With the best intentions, the duties and responsibilities of life close in on one. A week together, or better still a month, can help reestablish vitality and meaning in a marriage.

Once all the psychologic problems in a marriage are solved, then certain technics and mechanistic approaches, which abound, may be studied.

Desire often arises unbidden and efforts should be directed to maintaining a certain spontaneity. Occasionally the dishes can wait or the television program may not be so good that it were better missed. Many women love to be awakened to find themselves mistily, dreamily in the embrace of love—the body on awaking is often very sensual.

Spontaneity can also be retained by varying positions that have been found pleasurable. But it will usually be found that satisfaction occurs best in a relatively few favored ones.

It is seen that the matter of frigidity in the female is a many-sided problem, basically of a psychologic nature. To be cured she must work through a multitude of childhood misconceptions, resentments and guilt feelings. She must abolish all her old defenses. She must attain to the stature of mature womanhood which is receiving the most when it is most altruistic. She can be aided immeasurably by the attentions of a loving husband, sensitive to her problems; and by being permitted to share in his innermost dreams, desires, plans, fears and disappointments. They should permit nothing to interfere with their attaining this mutually enriching goal —since nothing this side of eternity can ever surpass it.

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Statement of Congressman Durward G. Hall Re: HR 4222, 87th Congress, Before the House Ways and Means Committee

Special Article

Mr. Chairman and Members of the Committee:

I am appearing before this Committee, not only as a Member of Congress, but as one who is qualified to discuss medical problems by virtue of my practice of medicine and surgery for the past 26 years before coming to Congress. I am also a Fellow of the American College of Surgeons, a Diplomate of the American Board of Surgery, and a delegate to the American Medical Association from the State of Missouri. My seven years of active duty in the U. S. Army also included service as Chief of Personnel, Army Surgeon General, during World War II. I have spent nine years as Medical Referee and consultant on Social Security for OASI and for the 22 county Southwest Missouri Vocational Rehabilitation Program.

Durward J. Hall, M.D.

Durward G. Hall, M.D., Springfield, Missouri, testified on the King-Anderson bill during the recent hearings. Prior to this, his first term in Congress, Dr. Hall practiced as a surgeon in Springfield. He has been active in affairs of the Missouri State Medical Association and has been a Delegate to the House of Delegates of the American Medical Association for several years.

I mention my own medical background, not as a reason for my appearance here today, but as a qualification for my testimony on a very complex issue. I do not believe I am casting any reflection on other witnesses who have appeared or who will appear in support of this legislation when I say that many of them, in discussing the possible effect of this legislation on our system of quality medical care, have never felt a pulsebeat or held a scalpel in their hands, and have no personal experience on which to base their claim that this legislation will not result in a lowering of medical standards. They are theorists theorizing in a medical field in which they have no knowledge, yet are perfectly willing to contract for someone else's personal services. They presume to dictate legislation in a field completely foreign to their own area of experience.

I am *opposed* to the legislation now being considered by this Committee for provision of medical care, under Social Security, of persons over 65.

As one whose lifetime has been spent in caring for the sick and the aging, my opposition certainly is *not* because I do *not wish* to see medical care extended to all persons in need. In fact, it is because I want to see both the *quality* and *quantity* of medical care *extended* (as we have been extending it for the past 100 years) that I am here, in opposition to this bill.

First, I would like to discuss, briefly, the contention of the Secretary of Health, Education and Welfare, that this legislation is not *"socialized* medicine."

Insofar as it involves a medical care program, administered by the federal government, which establishes hospital standards and criteria affecting four separate categories of physicians; insofar as it covers an entire group of our population, and insofar as it imposes a compulsory tax on both employees and employers, it clearly meets all the criteria for socialized medicine as defined in Webster's Dictionary, and as defined by the Socialist Party of the United States!

Is there a need for this kind of legislation? Absolutely not! I have seen only scattered inconclusive evidence.

The avowed purpose of Social Security is to provide a floor of protection to citizens with limited incomes to help them meet their minimum needs. It has never been assumed, nor should it, that Social Security is intended to deprive all our citizens of their personal responsibility to implement this floor of protection. This I am for!

There can be no more logic in setting up a separate category of "service benefits" for medical care than there is in setting up a separate category of "service benefits" for food, shelter or clothing.

Certainly the Congress would never consider an additional 1 per cent tax for food benefits, or an additional 1 per cent tax for shelter benefits. Yet once the door is opened for this kind of illogical reasoning, once the foot of the social planners is in the door by providing benefits for medical care, what is to prevent the same splintering action to be taken toward every other human need? We would then have federal control of the food industry, and federal control of the homebuilding industry. It has not yet become "fashionable" to ask for these controls, but apparently the Department of Health, Education and Welfare has no such restraints with regard to the practice of medicine. This is the entering wedge.

If this Committee, in its wisdom, decides to increase Social Security cash payments—*and taxes*—so that the recipients will then have what is considered adequate to meet all their needs—food, clothing, shelter, recreation, medical care—then that is the course which the Committee should take, at least leaving it to the individual to determine how it shall be spent.

Second, does this legislation have a moral, basic or natural justification, or will it destroy personal rights, will and incentive on the part of the patient as well as the physician?

Based on my own experience, I am certain that the answer to the first question is *no,* and the answer to the latter question is a resounding *yes!*

I have traveled extensively as a member of the Armed Forces and as a doctor in other nations of the world, many of which now have socialized medicine. To those who say this bill is not "socialized medicine" let me say it is singularly true that no country which has embarked on this path has ever stopped short of covering its entire population! It simply is not reasonable or rational to assume that we would be different. In fact, some major proponents of this legislation have stated this goal in the past! You are today considering the beginning of a state system that will engulf all medicine. We are speaking of socialized medicine! I see no reason why we should hasten down this primrose path of welfare statism!

I have seen the disastrous effect of state medicine in other countries. For instance, the British Broadcasting Company has prepared a documentary movie which confirms and updates my knowledge and depicts some of the results of their system. It includes a statement by a hospital administrator to the effect that in his district alone, there are 700 people on a three-year waiting list for needed general surgery; there is another six-year waiting list for persons needing orthopedic surgery, and nearly a thousand people waiting for gastrointestinal surgery.

The hospitals are literally jammed with persons who are not in need of hospitalization, but who are there because it is paid for them by the government . . . while others, in real need, cannot be admitted. Are the political pressures that would result in this country any different from those which have developed in England? I think not. There has been only one new hospital in the United Kingdom in the past 14 years and the ratio of physicians to patients is up from one physician for every 800 patients to one physician for every 1,500 patients. Contrast this with the United States where the ratio in 1949 was 1:741 and in 1959 had only slightly increased to 1:749.

What I am saying does not deny the existence of a problem insofar as our desire to provide the best possible medical care for the greatest number of people. But, gentlemen, we have had this same problem since our country was founded, and under our present system of "free medicine," we have accomplished far greater results than any other nation on earth including those who have long since adopted the path you now have under consideration.

In our continuing efforts to increase quality medical care and at the same time ease the burden of total medical costs for our aging population, we should recognize a primary cause—inflation—which affects not only the cost of medical care but of every single item in their budget—food, shelter, clothing, recreation. In many respects, the federal government has contributed to this inflation by its relentless insistence on assuming more responsibility than it can afford without taxing us beyond the point of no return. This bill absolutely guarantees more inflation!

I believe the Congress adopted sound legislation in the Kerr-Mills bill which preserves constitutional state-rights in spite of high-sounding objection to the means-test. We apply a means-test in literally hundreds of situations, in Biblical parable, in loans we seek from banks, in federal scholarships for outstanding needy students, every time we open a charge account, every time we finance an automobile, every time we apply for an FHA home loan, every time we attempt to distinguish real from fancied need! It is basic and natural to the way of life we know. The people recognize its virtue even if the welfare-staters do not! Every member of this Committee, at one time or another, has taken a means test and does not feel that he has been "degraded" by the experience.

Many states already have enacted legislation to participate in the Kerr-Mills program. That others, my own state included, have not done so is almost entirely due to the vast propaganda machine generated by those who wish only to pursue a course of socialized medicine and who have refrained from offering one word of encouragement for action on the part of the separate states. I am sure they would like to see state lines and state rights eliminated altogether, and all responsibility vested in a vast Washington bureaucracy.

Private insurance companies and the Blue Cross-Blue Shield plan have done a magnificent job, and are making strides in their efforts to do more. The home state of the Secretary of Health, Education and Welfare, Connecticut, has inaugurated private insurance to meet this need and already has demonstrated that it can be done at far less cost than under the Social Security approach.

I have introduced a bill, H. R. 7756, which would revise the Internal Revenue Code to give greater recognition to the income dilemma that confronts our aging citizens and their families. A copy of my remarks on this bill is furnished herewith for your information, and I ask that it be included in the hearings, Mr. Chairman.

Gentlemen, I do not profess to be an expert in tax matters. The members of this Committee are far more knowledgeable than I in this field and if you consider the basic provisions which I have proposed, you may wish to make many changes to be certain that it conforms with your own basic ideas of tax reform.

But while I may not be an expert in tax matters, I do believe I am qualified to discuss the medical implications of the bill now under consideration.

Finally, I would like to make the suggestion that members of this Committee, before acting on this controversial measure, consider making a trip to explore what has happened in other countries overseas which have adopted the course inherent in this legislation. Among other things, you will obtain a greater understanding of why today this country is looked upon as the great world center of medical research and practice; why 12,000 foreign physicians are doing their internship in this country, and why many of them are not returning to their homelands. Basically it is because we have the best system of health care wherein we maintain freedom of choice, dignity of the individual and incentive.

If the Committee should consider this overseas inspection trip. I will gladly, at my own expense, accompany you as a physician and explain the medical implications of what you will see, and offer you my professional services en route—at no expense to the government or you!

I thank you for your time and consideration of these remarks.

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J. H. Summers, M.D.

President's Message

Everyone, I suspect, finds himself occasionally in the position of being strongly opposed to a particular policy or action of our federal government.

Yet in the face of the government's tremendous size and concentration of political power, we—as individual citizens—may feel a sense of hopeless frustration in attempting to alter a course of national policy that we conceive to be ill-advised or dangerous.

What can one private citizen do, for example, to influence our nation's foreign policy? Or how can he reverse the trend toward government paternalism that inevitably leads to loss of individual initiative and the ability of people to decide important questions for themselves?

Although all of us may, at times, experience this feeling of futility, there are in our republican system of government a number of ways which you and I can influence national policy. One of the surest, most effective means of making our judgment and convictions felt in an area of vital public concern—namely, the preservation of non-governmental medicine—is to contribute to the American Medical Education Foundation.

Your gift to AMEF, as Dr. Murphy indicates in this month's guest editorial on "Missouri AMEF Month," is a tangible barrier to incursions by political agencies into the private practice of medicine. Therefore, I urge you to support this worthwhile program.

Help keep our medical education system free of federal control, to the ultimate benefit of the schools, the medical profession and the patients we serve.

J. H. Summers, M.D.

EDITORIALS

EVERYTHING GOES UP

Like women's hemlines, the trend in Missouri continues upward for contributions to medical education. But regardless of future trends in ladies' fashions, we are hoping that the rise in physician support of medical schools will continue going up and up indefinitely.

During the last three years, Missouri physicians and the Woman's Auxiliary to MSMA have contributed almost $31,000 through the American Medical Education Foundation (AMEF). In 1958 the total AMEF gift from this state amounted to $8,049; in 1959, $11,435, and in 1960, $11,512.

More than keeping pace with AMEF donations has been the increase each year in funds which Missouri doctors have contributed directly to their Alma Maters. In 1958, the total direct contribution of 1,077 Missouri physicians was $55,478. The following year, 1,249 doctors gave $67,036 to medical schools—an increase of 172 contributors and an extra $11,558 in needed funds. Last year (1960), however, proved to be a record year for alumni giving as 1,280 physicians almost doubled the size of their combined gift, contributing $96,246, which averages more than $75 per contributor.

All told, about one of every two medical doctors in the state gave personal support to medical education in 1960, either through AMEF or through direct subscription to the schools. The total given by these 1,490 practicing physicians came to $107,761—truly a fine showing!

More important perhaps than the mere statistics of past performance is the implication that today physicians are exhibiting a growing personal concern for the financial crisis in the medical schools and an active wish to help school administrators avoid further reliance on the deceptive crutch of federal aid.

On the other hand, of course, physicians cannot afford to delude themselves into thinking that the present level of financial support adequately meets the schools' needs. The gratifying fact that almost half of all practicing physicians in Missouri last year contributed to medical education is also counterbalanced by the fact that half did not give.

Unless we, the doctors, demonstrate our willingness to slam the door on federal aid—and control—of educational institutions, we can scarcely expect other private donors to recognize the threat or the need and respond generously.

During the month of October, which again this year is being designated by the MSMA as "Missouri AMEF Month," each of us will have the opportunity of weighing our own responsibility to the medical schools which equipped us for our present role in life.

In the mail you will soon receive a letter explaining in detail the purposes, function and achievements of AMEF, the profession's own instrument for channeling funds to medical schools. All gifts to the Foundation, whether marked for the general pool from which each school derives an equal grant or marked for your Alma Mater, is deductible when computing federal income taxes.

I sincerely hope that this year everyone of us will give generously. It has been suggested that as a useful guide in determining the amount of our gift, each of us consider setting aside for AMEF the equivalent of one office call fee per month for twelve months.

Regardless of the amount you feel you can afford to contribute, the important thing to remember is that the need is urgent and the cause of vital significance to you and me as doctors who want to see the private practice of medicine strengthened in the years ahead. May we count on your support?

James P. Murphy, M.D.
Chairman, Committee for AMEF

FEDERAL MEDICAL CARE PLAN WRONG

Such is the heading of an editorial which the *Missouri Farm Bureau News* reprinted from the *Louisiana Press Journal*. The editorial reads:

We cannot agree with our own Senator Edward V. Long and others in Washington, including the Administration, on their insistence for a federal medical care program for the aged.

It seems that politicians are using the worthy needs of the few for a tear-jerker method of forcing socialized medicine upon the many who neither need it nor want it.

At the present time H. B. 4222 is being con-

(Continued on page 1058)

News—Personal and Professional

Speaker at the October 12 meeting of the Medical History Group, Columbia, will be **Vernon E. Wilson,** M.D., Columbia. He will speak on "Medical Education in the Mississippi Valley Region." Meetings of the group, open to all interested persons, began in 1958 and are held once a month in Room M437 of the Medical Sciences Building at the Medical Center.

At a recent annual meeting of the staff of St. Louis County Hospital, **E. Lee Dorsett,** M.D., Clayton, was elected chief of staff. **R. C. Kingsland,** M.D., Clayton, was elected associate chief of staff, and **Curtis H. Lohr,** M.D., St. Louis, secretary.

Speaker at commencement ceremonies for 23 graduates of the Burdge-Protestant Hospital School of Nursing in Springfield was **Robert D. Duncan,** M.D., Springfield. Dr. and Mrs. **Charles E. Lockhart,** Springfield, provided music for the occasion.

A one day panel on "Management of Alcoholism" has been announced for November 12 at St. Louis, sponsored by the St. Louis Medical Society, the St. Louis County Medical Society and the St. Louis Academy of General Practice.

The American College of Chest Physicians conferred fellowship certificates on 204 physicians at their summer meeting, among them Drs. **Hector W. Benoit, Jr., Edward G. Kettner, Warren F. Wilhelm,** Kansas City, and **Edward H. Fischer,** North Kansas City.

The Lions Club of Wichita, Kansas, had as speaker recently **Ralph E. Duncan,** M.D., Kansas City, who spoke on "Alcoholism—the Hole in the Pocketbook of Business and Industry."

EDITORIALS

(Continued from page 1057)

sidered, which would provide medical care for aged social security recipients, and which would be supported by an increase in social security withholdings, both from the employer and employe. Not much of a tax increase to start with; but the tax increase would cost Missourians about $37 million a year—about $9 million more than the state is spending for mental health operations.

Even with this cost, the program would not help the small per cent who do need help. It would help only those covered by social security—most of whom already have medical care coverage through private insurance programs. The Health Insurance Association of America estimates that 90 per cent of the aged will be covered by private medical insurance by 1970.

Social Security, as the federal program now exists, has been with us so long that all of us accept it, or almost all. But a serious look around will show us that, beneficial as we acknowledge it to be, it has gone a long ways to foster the false notion that the government owes us a living. "Why worry, the government will take care of us!"

Thrift is no longer the virtue it was in Ben Franklin's time!

Self-determination is still something we Americans value—but there won't be much chance for it in the field of medical care as socialized medicine creeps in on us. H. B. 4222 is one step in that direction without even fulfilling the purpose for which it is ostensibly planned.

More and more we are becoming a nation of "grasshoppers" instead of "ants." And our paternalistic federal government is working hard to make the change-over complete.

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Ramblings of the Field Secretary

More than a hundred high school coaches and physicians (much in the minority) attended an Athletic Injuries Conference on Sunday, August 27, at the St. Louis Medical Society Auditorium. The conference was co-sponsored by St. Louis Medical Society, Missouri High School Activities Association, St. Louis Public High Schools, St. Louis Lutheran High Schools and St. Louis Archdiocesan High Schools.

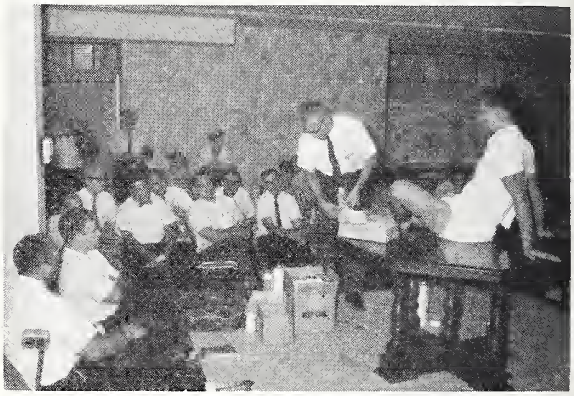
Dr. Roulac, Dr. Perry, Dr. O'Donoghue and Mr. Rockwell served as panelists and Dr. Conrad as moderator.

The morning session included talks by: Don H. O'Donoghue, M.D., Team Physician, University of Oklahoma; Jack Rockwell, Trainer of St. Louis Football Cardinals; Eddy Davidson, St. Louis Football official; Harry Burrus, Director of Athletics, Washington University; George E. Roulhac, M.D., neurosurgeon, St. Louis, and William Perry, M.D., internist, St. Louis.

Coach Devine of the University of Missouri was the luncheon speaker.

Following these talks Marshall B. Conrad, M.D., Chairman of the Sports Injuries Committee of St. Louis Medical Society, moderated a panel discussion on audience questions directed at the speakers.

At the conclusion of an excellent buffet luncheon, compliments of the St. Louis Medical Society, those present were privileged to hear an interesting talk by Dan Devine, Head Football Coach, University of Missouri, entitled "What the Tigers Do to Prevent Injuries." Coach Devine's remarks touched off somewhat of a general discussion and some controversy over when prep-school boys should begin football workouts prior to the first fall game. The big question seemed to be, "how much" conditioning and practice is sufficient before the first game. There was considerable agreement that the weather was not of too great concern as long as the workouts were not too strenuous.



Mr. Melin gave a taping demonstration.

The afternoon session presented a demonstration of taping and conditioning by Bruce Melin, Trainer of the St. Louis Washington University Bears, and Jack Roekwell, Trainer for the St. Louis Football Cardinals.

New Medical Center

Through a community wide endeavor, Larry Dowell, M.D., is practicing medicine at the new Pattonsburg Medical Office Building. Prior to July 17, 1961, the date Dr. Dowell officially began practicing in Pattonsburg, a town of some 875 people in Northwestern Missouri, the community had been without a resident doctor of medicine for a number of years. Approximately two years ago the Lions Club initiated a cam-

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The new Pattonsburg Medical Center opened in July.

paign to build an attractive doctor's office with the idea of interesting a young M.D. to locate in Pattonsburg. The Sears-Roebuck Foundation was contacted for advice and planning assistance. Following a public meeting and door-to-door contacting the town approved a $40,000 bond issue to finance the new office.

Dr. Larry Dowell is a rural Missouri boy, reared at Gallatin, and a graduate of the Medical School at the University of Missouri in 1960. He informed me on my recent visit that the availability of the new office was a big factor in his locating in Pattonsburg. He has leased the building for five years. It is built to accommodate two doctors with no parking space problem.

On Sunday, July 16, the Pattonsburg Community staged "Dr. Dowell Day" with a special program in honor of their new doctor. Hundreds of people from the area came to meet the new doctor, inspect the attractive office, and hear the featured speakers. James R. McVay, M.D., Kansas City, member of the Sears-Roebuck Foundation Medical Advisory Board, and Col. Hugh H. Waggoner, Superintendent of the State Highway Patrol, were guest speakers.

J. LARRY DOWELL M.D.

Dr. Dowell seated in his new office.

MISSOURI ACADEMY OF GENERAL PRACTICE

(Continued from page 1014)

SYMPOSIUM ON SURGERY

1:30 p.m. If I Had an Ulcer, Philip Thorek, M.D., Chicago, Associate Clinical Professor of Surgery, University of Illinois School of Medicine; Professor of Surgery, Cook County Graduate School of Medicine.
1:50 p.m. Fat—the Mud of Surgery, Ralph T. Bowers, M.D., Memphis, Chief of Surgical Service, Veterans Administration Medical Teaching Group Hospital.
2:10 p.m. Surgical Treatment of Cancer of the Skin, John J. Modlin, M.D., Columbia, Mo., Professor and Chairman, Department of Surgery, University of Missouri School of Medicine.
2:30 p.m. Intermission to View Exhibits.
3:00 p.m. Carcinoma of the Lung, C. Frederick Kittle, M.D., Kansas City, Kansas, Associate Professor of Surgery, University of Kansas School of Medicine.
3:20 p.m. Gallbladder Disease, Philip Thorek, M.D., Chicago.
3:40 p.m. Adrenalectomy for Hopeless Carcinoma of the Breast and Prostate, Ralph T. Bowers, M.D., Memphis.
4:00 p.m. Panel Discussion on Surgery.
4:30 p.m. Adjournment.

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NEW MEMBERS

Marirn R. Alberg, M.D., 215 Pershing Road, Kansas City 8, has become a member of the Jackson County Medical Society. Dr. Alberg is a native of Colorado, received his preliminary education in Denver, and his M.D. degree from University of Colorado in 1947.

Daniel L. Azarnoff, M.D., 6954 Amherst Ave., St. Louis 39, has become a member of St. Louis Medical Society. Dr. Azarnoff is a native of New York, received his preliminary education at Rutgers University, and his M.D. degree from University of Kansas in 1955.

Jack Kayes, M.D., 748 Cella Road, St. Louis 24, has become a member of the St. Louis Medical Society. Dr. Kayes is a native of Connecticut, received his preliminary education at Yale, and his M.D. degree from Washington University in 1957.

Rolf Krojanker, M.D., 5400 Arsenal St., St. Louis 39, has become a member of the St. Louis Medical Society. Dr. Krojanker is a native of Germany, received his preliminary education at French College in Berlin, and his M.D. degree at Central University of Ecuador, Quinto, Germany, in 1955.

Kenneth R. Nelson, M.D., 1625 South 14th St., St. Louis 4, has become a member of the St. Louis Medical Society. Dr. Nelson is a native of Minnesota, received his preliminary education at the University of Minnesota, and his M.D. degree at the University of Minnesota in 1929.

Oscar Schneider, M.D., 4050 Lindell Blvd., St. Louis 8, has become a member of the St. Louis Medical Society. Dr. Schneider is a native of California, received his preliminary education at the University of Oregon and Reed College, and his M.D. degree at the University of Oregon in 1931.

Harwood N. Sturtevant, M.D., Professional Building, Springfield, was reported as a new member of the Greene County Medical Society in the September issue. Dr. Sturtevant is a native of Wisconsin, not Illinois as stated, and his preliminary education was received at Carleton College and Notre Dame University. He received his M.D. degree from St. Louis University in 1949.

DEATHS

Breid, Jacob, M.D., Spickard, a graduate of the University of Illinois School of Medicine, 1902; member of Grand River County Society; aged 92; died August 3, 1961.

Lau, Gustav A., M.D., St. Joseph, a graduate of St. Louis University School of Medicine, 1905; member of Buchanan County Medical Society; aged 80; died August 17, 1961.

Lucas, John H., M.D., Brookfield, a graduate of Colorado Physicians and Surgeons, 1908; member of Grand River County Medical Society; aged 78; died July 30, 1961.

MeGlothlan, Arthur B., M.D., St. Joseph, a graduate of Washington University School of Medicine, 1902; member of Buchanan County Medical Society; aged 88; died August 18, 1961.

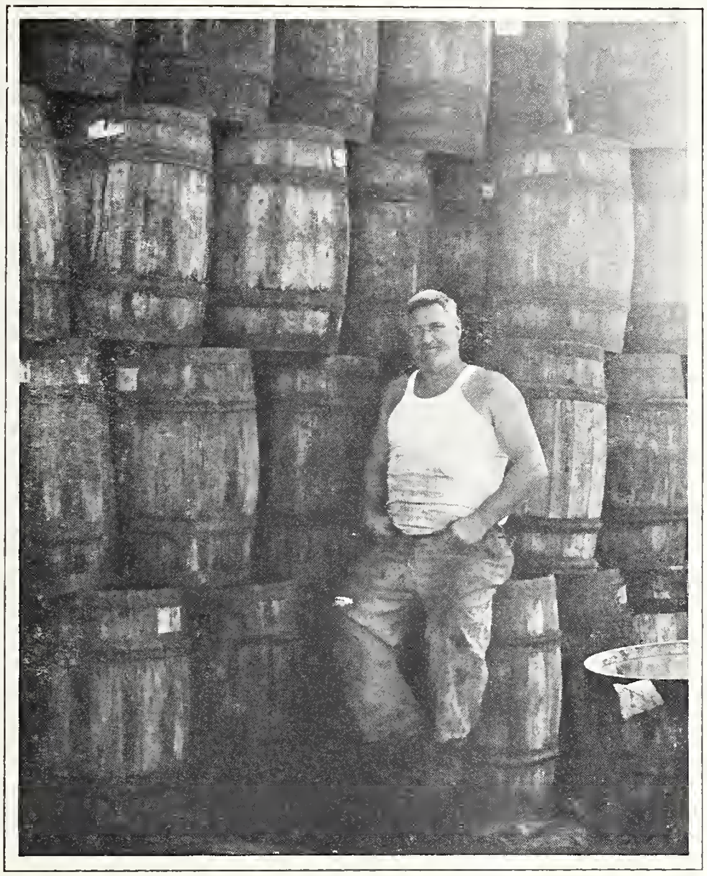
Robichaux, Eugene C., M.D., Excelsior Springs, a graduate of Tulane University School of Medicine, 1906; member of Clay County Medical Society; aged 77; died August 18, 1961.

Wright, George W., M.D., Webb City, a graduate of University of Nebraska School of Medicine, 1930; member of Jasper County Medical Society; aged 57; died July 17, 1961.

WOMAN'S AUXILIARY

(Continued from page 1016)

are living in perilous times." I am sure we would not jump into deep water, without knowing how to swim. We must face the future with confidence, and this can come only from understanding and knowledge. Our Auxiliary progam is geared to the needs of today and to the needs of the future. A warm invitation is issued to all physician's wives inviting them to join with us in a fellowship of friends, all working together in achieving our highest goals.



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Dosage: Adults, 1 Caplet (200 mg.) three or four times daily; children (5 to 12 years), from 50 to 100 mg. three or four times daily.

He needs his muscles working properly—
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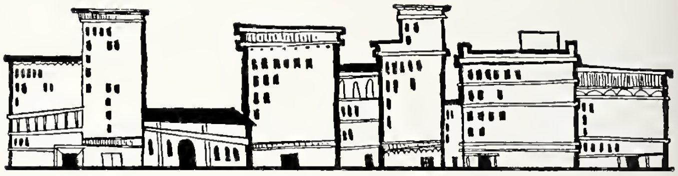
From the Medical Schools



UNIVERSITY OF MISSOURI

Medical Center Film Selected

A movie produced in the Cardiopulmonary Laboratory of the Medical Center has been selected for showing at an international film exhibition to be presented during the fifteenth General Assembly of the World Medical Association in Rio de Janeiro in September.

The film, entitled "Diagnosis of Common Congenital Heart Defects," was one of 20 selected from the world's medical centers for viewing at the meeting of the AMA in New York in June. The 23 minute sound and color movie was written and directed by Dr. J. M. Martt, associate professor of medicine.

Cancer Demonstration Clinics

The response of Missouri physicians to the Postgraduate Cancer Demonstration Clinics being held each month is reported to be excellent. The quotas for the September and October clinics have been filled, but there are still openings for attendance in subsequent months.

These two-day clinics, which are repeated once each month, are designed to assist physicians in increasing their competency in the technics for diagnosis of cancer. They are open to all physicians but enrollment in each clinic is limited to six physicians in order to provide individualized teaching.

Details about the clinics are available from Dr. Charles H. Koelling, executive director of Postgraduate Medical Education.

Trips and Talks

Dr. David Davis, associate professor of psychiatry, spoke on "The Therapeutic Community as a Psychiatric Technique" at a meeting of the Department of Psychiatry of the State University of New York July 17. Dr. Davis discussed the role of milieu therapy and the therapeutic community as effective modern technics in treating severely disordered psychiatric patients and described the use of these technics in clinical service and teaching as organized at the University of Missouri Medical Center.

Dr. Fernando Tapia, assistant professor psychiatry, discussed "A Child Psychiatrist's Views of Mental Health Problems in the Schools" during the University of Missouri Graduate School's summer course for academic counsellors.

Dr. Clement E. Brooke, associate professor of pediatrics, served as visiting professor at Kansas City General Hospital July 27. There were formal grand rounds with case presentations. Informal lectures and discussion periods were held on water and electrolyte problems for children, problems of neurology in children and bed wetting as a maturation problem.

Dr. Brooke also visited Camp Ripley, Minnesota, and Volk Air National Guard Base, Wisconsin, August 1-3 at the invitation of the Adjutant General of the Air National Guard of the state of Missouri. He was a member of a group, including senators, representatives and other interested persons of the state, which toured these installations. The purpose of Dr. Brooke's visit was to inspect informally and to become better acquainted with the medical program of these two national guard units.

A paper on "Energy Transport Through Closed Tissue Walls by Capacitive-Conductive Coupling" was presented by two members of the Department of Surgery during the fourth International Conference on Medical Electronics held in New York July 16-21. Authors of the paper are Dr. Hugh Stephenson, professor, and Dr. John C. Schuder, associate professor, in the department.

Dr. Ian M. Thompson, professor of surgery (urology), visited Tulane University July 28-August 5 to establish a research fellowship liaison for the coming year with Dr. Jorgen Schlegel.

Dr. Frank B. Engley, professor and chairman of the Department of Microbiology, attended a planning meeting of the Missouri Public Health Association in Jefferson City July 25. Dr. Engley is chairman of the program and publications committee of the association. He also presented two lectures on health and personal hygiene at the Conference on Cosmetology in Columbia August 1.

Dr. Herbert S. Goldberg, associate professor of microbiology, has returned from Southern Illinois University where he taught microbiology to high school teachers under the auspices of

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against relapse
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PRECAUTIONS: As with many other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs discontinue medication. Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under observation.

Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

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Plan now to attend the A.M.A. Clinical Session in Denver, November 27-30

the National Science Foundation Summer Institute.

Dr. M. H. Ivey, assistant professor of microbiology, visited Parke Davis Research Laboratories in Ann Arbor, Michigan, August 7 and the School of Public Health of the University of Michigan.

Elections

Dr. Thomas D. Luckey, professor and chairman of the Department of Biochemistry, has been invited to membership on the six-member Scientific Council of the International Society for Research on Nutrition and Vital Substances. Other members of the Council are from Germany, Belgium, Italy and South Africa. Dr. Luckey, who is on sabbatical leave, will attend a program of the Society in Liege, Belgium, September 16 and will be present, also, for advisory committee meetings in Holland and Germany.

WASHINGTON UNIVERSITY

Appointments

Five new assistant professors and an associate professor have been appointed to the faculty at Washington University School of Medicine. Dr. Estelle Brodman was named librarian and associate professor of medical history in anatomy. She has been associated with the National Library of Medicine, Washington, D. C., since 1949. She holds an A.B. degree from Cornell University and a B.S., M.S. and Ph.D. from Columbia University, where she also served as an instructor.

Appointed assistant professors were Drs. Paul Dewald, John W. Higgins, Bryce Munger, Malcolm L. Peterson and Teresa Vietti. Dr. Dewald, assistant professor of clinical psychiatry, has been assistant professor in psychiatry at the University of Rochester School of Medicine and associate psychiatrist at Strong Memorial-Rochester Municipal Hospitals since 1957. He holds degrees from Swarthmore College and the University of Rochester School of Medicine. Dr. Higgins, assistant professor of clinical psychiatry, has been chief consultant to the Institute of Living, Hartford, Conn.; associate clinical professor of psychiatry at Yale University School of Medicine and attending psychiatrist at Grace-New Haven Community Hospital. He has an A.B. from Columbia University and a M.D. from Cornell University. Dr. Munger, assistant professor of anatomy, has been serving in the U. S. Air Force at the Armed Forces Institute of Pathology since 1959. An alumnus of Washington University School of Medicine, he attended the University of Washington, Seattle, for his undergraduate work. Dr. Peterson, appointed assistant professor of medicine, will assume his duties January 1, 1962. He is on leave of absence now while studying in London. In 1960-61 he was a fellow in the Department of Medicine at Cornell University. He holds a B.S. from Stanford University, a M.S. from the University of Washington and a Ph.D. from the Rockefeller Institute. Dr. Vietti, assistant professor of pediatrics, has spent the last year in Ankara, Turkey, as visiting pediatrician in Hacettepe Children's Hospital. From 1958 to 1960 she was an instructor at the University of Texas Southwestern Medical School. She has an A.B. from Rice University and a M.D. from Baylor University College of Medicine.

Modernization Planned

A renovation and modernization program for Washington University-Barnes Hospital Medical Center is planned to bring patient facilities up-to-date, according to the 1960 annual report of Barnes Hospital. The program will begin as soon as an outline of needs is approved. In 1960 there was a total of $1,074,000 given in free hospital care and subsidy to 111,753 patient visits in the clinics of the medical center. The average daily hospital census was 735.

Student Awards

Two student fellowships for a year's study in Europe have been awarded to L. E. Moore, Tulsa, Okla., and Irvin Kasser, Trenton, N. J. They will each receive $3,200 from student research funds granted the medical school by the National Institutes of Health for study from September, 1961, through June, 1962. Moore will go to the Centre Nationale de Transfusion Sanguine in Paris to study under Dr. Marcel Bessis. Kasser will study in the Department of Neurophysiology of the Karolinska Institute in Stockholm under Dr. Bernhard Frankenhauser.

Six freshmen have been awarded Jackson Johnson Scholarships. The scholarships, awarded on a regional basis, went to Neil Crane, St. Louis; Richard Myers, Dexter, Mo.; Margaret Strom Ansari, Sidney, Mont.; Barton Grooms, Amarillo, Texas; Charles Meredith, Quincy, Ill., and Peter Schwartz, Chicago. The Scholarship Fund was established in 1930 when $250,000 was bequeathed to the School of Medicine under the will of the late Jackson Johnson, former president of International Shoe Company, St.

(Continued on page 1070)

WHEN
THE PATIENT
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ORGANIC DISEASE
COMPLAINS OF chronic constipation,
flatulence, belching,
intestinal atony,
indigestion
CONSIDER biliary dysfunction and NEOCHOLAN

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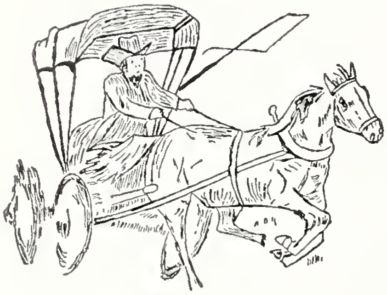
Missouri Medicine in Review



FORTY YEARS AGO

Dr. Harry F. Parker, Warrensburg, was elected state commander of the Missouri branch of the American Legion at the annual convention held in St. Joseph, September 20.

Dr. J. A. Waterman, Breckenridge, a member of Caldwell County Medical Society, has been appointed physician at the state penitentiary, Jefferson City. Dr. Waterman served in this position during the administration of Governor Hadley.

September 7 marked the opening of the activities of the Buchanan County Medical Society after a summer vacation of two months. The members assembled at 7:30 p.m. as guests of Dr. C. R. Woodson at the Woodson Sanatorium. Dr. Woodson invited the Society to return after the 1922 vacation.

The Cass County Medical Society met in Harrisonville, September 8. Dr. L. J. Schofield spoke to the Society on "Group Medicine in Johnson County." He gave a brief history of the formation and operation of the Johnson County Clinic, of which he is a member, and answered many questions regarding the plan, which was of much interest to the members of the Cass County Society, as plans are in progress for the formation of a similar group in Harrisonville.

TWENTY-FIVE YEARS AGO

The Jackson County Medical Society met for the first time in its new auditorium in the Receiving Building of the General Hospital at Kansas City on September 15. The Society has met at various places during its long existence, but this is the first time it has had a wholly adequate and satisfactory home.

The Wayne County Medical Society was reorganized at a meeting in Piedmont on August 11. Dr. Thomas C. Piles, Piedmont, was elected president, and Dr. John F. Wagner, Greenville, secretary-treasurer. The Society is in the Twenty-Fourth District of which Dr. T. W. Cotton, Van Buren, is Councilor.

Reading one's own blood pressure has taken its place as an amusement and in the East has become the subject of a legal battle. A device at Coney Island by which the individual can make his own reading was declared in violation of the state medical practice act by the New York State Department of Education. On August 12, an operator of one of the machines was arrested on the charge of practicing medicine without a license, but the case has not been brought to trial as yet.

The Missouri Public Health Association and the Missouri Tuberculosis Association will hold a joint session in Columbia, October 1, 2 and 3, with headquarters at the Tiger Hotel. Dr. J. F. Bredick, St. Louis, is president of the Missouri Public Health Association, and Dr. Irl Brown Krause, Jefferson City, is president of the Missouri Tuberculosis Association.

TEN YEARS AGO

Mount St. Rose Sanatorium, St. Louis, will celebrate the fiftieth anniversary of its establishment by a two day open house, October 6 and 7, and will feature exhibits tracing the history of tuberculosis and treatment during the last fifty years.

J. Albert Key, M.D., St. Louis, will act as chairman of one of the sessions of the clinical congress of the American College of Surgeons which will convene in San Francisco November 5 to 9.

FROM THE MEDICAL SCHOOLS

(Continued from page 1068)

Louis. The income of the fund was to be used "to aid worthy and desirable students in acquiring and completing their medical education." Awards are made on the basis of the applicant's college academic record, score on the medical aptitude and other tests, recommendations of professors, ability, character and qualities of leadership. The stipend varies with the individual's financial need.

Curiosa et Trivia

WILLIAM B. McCUNNIFF

Muttering darkly about the cost, "health conscious" Americans are spending about 15 billion dollars a year on drugs, hospitals and physicians. And an occasional voice in the wilderness complains about the 16 billion spent on tobacco and alcohol . . . a $1,000,000,000 differential!

Nine nations have better infant death rates than the United States. These include Sweden, Holland, Australia, Norway, Switzerland, U. K., Denmark, New Zealand and Finland.

It is estimated that about 5 per cent of the 400 tons of antibiotics used in North America last year were used correctly.

Eighty years of progress: Prior to WW II, Army physical qualifications required men to have adequate opposing teeth; this apparently a holdover from Civil War when front teeth were required to tear the cartridges for muzzle loaders.

Capsule Clinics

- Preclinical cervical cancer antedates clinical cancer by approximately 10 years. Dodds, J. R., and Latour, J. P. A., Am. J. Obst. & Gynec. 82:33, 1961.
- Multiple sclerosis at an early stage may present itself as a functional neurological disorder characterized by recurring attacks of sudden deficit of motor function followed by rapid recovery. Zeldowicz, L., Canad. M.A.J. 84:937, 1961.
- Progesterone in physiological dosage does not influence sebaceous glands, nor does sebum production fluctuate with the cyclic changes of the menstrual cycle. Strauss, J. S., and Kligman, A. M., J. Invest. Dermatol. 36:309, 1961.
- Female type pseudohermaphroditism is not rare. The diagnosis is often missed at birth, the child being mistaken for a boy with hypospadias and undescending testes. All such infants should have Barr counts of chromosomes at birth to establish the genetic sex unequivocally. Overstreet, E. W., Am. J. Obst. & Gynec. 81:1147, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

CONGRESS ADJOURNED

The first session of the 87th Congress adjourned at 6:10 a.m., September 27, after the longest session in 10 years.

MEDICAL BILLS PASSED

The following bills of medical interest became law during this session of Congress: H. J. Res. 306, a posthumous medal for Thomas Dooley, M.D.; H. J. Res. 358, establishing an annual poison prevention week; S. Res. 154, an expression of the Senate favoring the establishment of a Great White Fleet to provide medical care and other aid at times of natural disaster; S. 336, providing grants for training of teachers of the deaf; S. 1922, increasing the mortgage guarantee of nursing homes from 75 to 90 per cent; S. 2237, making permanent the provisions under which certain immigrants with tuberculosis may be admitted to the U. S.; H. R. 3980, amending the Food Additive Law to provide transitional provisions; H. R. 4884, which had a provision under which the federal government could increase its contribution for medical care under Old Age Assistance from $12 to $15; H. R. 4998, the Community Health Facilities and Services Act, and H. R. 6441, the Water Pollution Control Act.

MANY BILLS CONSIDERED

There were 14,026 bills introduced in the Congress and the *Congressional Record* ran to 29,034 pages. Of the bills proposed, 555 were of interest to medicine. The American Medical Association submitted statements on nine of the bills offered, four statements in favor, three in opposition, and two informational.

The A.M.A. supported H. R. 1341, safety devices on government purchased automobiles; provisions of S. 1072 dealing with medical school construction; H. R. 10, tax-deferred retirement plan for the self-employed, and appropriations for the Civil Defense Shelter Program.

The A.M.A. submitted statements in opposition to the King bill (H. R. 4222); the Kefauver drug bill (S. 1552), and H. R. 6471 on drug advertising.

Informational statements are filed on bills on constitutional rights of the mentally ill and the exchange student program.

PRESS COMMENTS

Commenting on the general work of the Congress, the *Chicago Sun-Times* editorialized: "The Democratic Congress that gleefully assembled in Washington last January, with one of its own in the White House for the first time in six years, is preparing to go home this week in a far more sober mood."

The *New York Times* said: "The 87th Congress, meeting in a year that cried for new dimensions in statesmanship, has responded with something less than greatness."

A *Wall Street Journal* article stated: "Amid the dying echoes of the current Congressional session one fact emerges startlingly clear: The Kennedy administration faces a crisis in leadership in the increasingly conservative House of Representatives."

The *Chicago Daily News* pointed out: "Time and again the lower chamber chopped deeply into spending proposals or rejected measures dear to the hearts of Administration liberals."

Nearly all of the editorials mentioned that the medical aid for the aged plan tied to the compulsory social security program was not passed. The *Chicago Daily News* commented: "Congress was right, too, in bypassing the Administration's proposal to impress the nation's older people into a medical program under Social Security." The *New York Times* observed: "The White House ducked a fight on its even more controversial proposal to give medical care to the aged under social security. This will be on the election year calendar when Congress reconvenes. . . ."

The newspapers took note of the fact that the House, instead of the Senate, had become the conservative legislative body.

NEW PROPOSALS

The Council on Legislative Activities of the A.M.A. points out that in the interim of Congress there will be much discussion on medical care for the aged and that many proposals will be offered as to what should be done. The council suggests that the following questions be asked concerning each proposal: How will the proposal affect the care of patients? How will it change medical practice in the future? How much will it cost? What will its ultimate impact be on the basic philosophy of the nation?

How to help your patient stick to a geriatric diet

The secret ingredient in a successful diet is acceptance. Meat is as important for the old as for the young—and every bit as appealing. Chops, fish steaks, chicken parts or cutlets can be bought in small portions. Chopped or strained vegetables not only supply the patient on a geriatric diet with needed vitamins, but are easy to chew. The same is true of easy-to-make, one-dish casseroles. Patients of advanced years enjoy salads because they need no cooking, and canned fruits are an extra convenience for the elderly. Fluid intake should be liberal, of course.

A glass of beer can add zest to a patient's diet

Sodium 17 mg.
calories 104/8 oz. glass
(Average of American Beers)

Delicious dishes like these can help the aged enjoy a better balanced diet.

United States Brewers Association, Inc.

For reprints of this and 11 other diet menus, write us at 535 Fifth Avenue, N.Y. 17, N.Y.

Across
Missouri

H. B. 133 Vetoed by Governor

The chiropractic bill, H. B. 133, was adopted by the Missouri Legislature, but later vetoed by the Governor on the basis that the bill authorized employment of an attorney and that such service was provided by the Attorney General. The bill had given a new definition of chiropractic as follows: "The practice of chiropractic is defined to be the science of palpating and adjusting by hand the movable articulations of the human spinal column, for the correction of the cause of abnormalities and deformities of the body. It shall not include the use of surgery, obstetrics, osteopathy, nor the administration or prescribing of any drug or medicine, radioactive substance or radiation other than x-ray spinograms."

Without HEW's Help

Under this heading, the St. Louis *Globe-Democrat,* on September 21, carried the following editorial:

"Washington's bureau in charge of Health, Education and Welfare was bitterly disappointed when Congress balked at its new federal health care program.

"This would have tacked on health costs to the social security system. In the end, Washington probably would be setting doctors' fees and otherwise regulating the practice of medicine—like a public utility.

"HEW is not taking the defeat lying down, however. It pursues its campaign for federal health care by playing down the great benefits needy elderly Americans are already getting under the Kerr-Mills bill passed last year.

"This bill gives the states federal aid if they will establish health care programs for the elderly who can't take care of their own hospital or doctor bills. It also provides matching funds to states to improve their medical benefits to needy over 65.

"Representative Thomas B. Curtis points out that the Kerr-Mills bill has increased the amount of public funds spent on health care of the elderly by $144,276,616 a year. 'By February or March of 1962, the annual net increase will be in the neighborhood of $300,000,000,' he says.

"These state-run programs are well able to provide health care for our needy senior citizens —especially if HEW will push them. But Washington bureaus don't like any programs they can't run themselves.

"As Mr. Curtis notes, HEW and other Washington bureaus have a hard-boiled policy: rule—or ruin."

H. R. 4222 Would Have Cost Missourians $37 Million

The tax increase, provided for in H. R. 4222, would cost Missourians about $37 million a year, based on the percentage of social security tax paid by Missourians to the total tax collected.

This statement was part of the presentation to the U. S. House Ways and Means Committee by the Missouri Public Expenditure Service, at the hearings on H. R. 4222.

The statement pointed out that the amount it would cost Missourians was about $9 million a year more than Missouri is spending from state funds for current higher education needs and $10 million a year more than the state is spending for mental health operations.

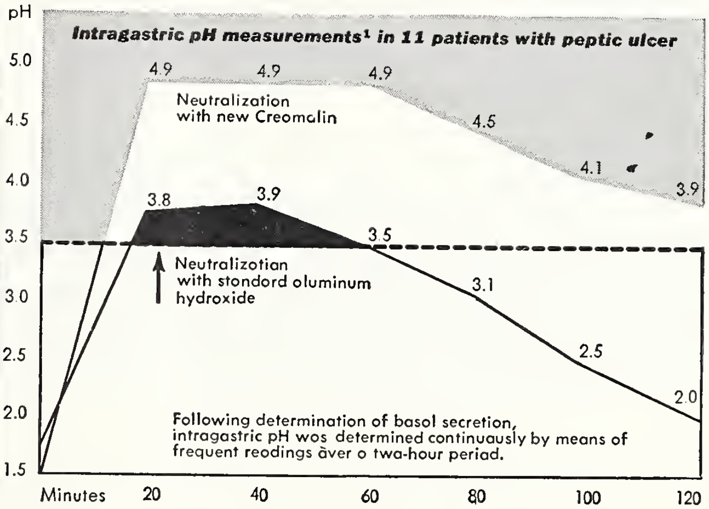
Missouri State Medical Foundation

Sixty-two students have received loans from the Missouri State Medical Foundation, the organization sponsored by the Missouri State Medical Association to provide financial aid to medical students who are residents of the state. The organization was chartered on March 31, 1961. Five students have received two loans for different years. Fifty-five loans have been made to students at the University of Missouri School of Medicine; five to students at St. Louis University School of Medicine, one to a student at Washington University and one to a student at the Albert Einstein University School of Medicine.

Less than $10,000 of the original $50,000 placed in the fund remains. Several applications for loans are pending.

Acts as well in people as in test tubes

in vivo neutralizes 40 to 50 per cent faster— twice as long at pH 3.5 or above



Intragastric pH measurements¹ in 11 patients with peptic ulcer
pH
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
4.9
4.9
4.9
4.5
4.1
3.9
Neutralization with new Creomalin
3.8
3.9
3.5
3.1
2.5
2.0
Neutralizotion with stondord oluminum hydroxide
Following determination of bosol secretion, intragastric pH wos determined continuously by means of frequent reodings över o two-hour period.
Minutes
20
40
60
80
100
120

New Creamalin®
Antacid Tablets

Buffers fast[1-4] for fast relief of pain— takes up more acid

Heals ulcer fast—action more prolonged *in vivo*

Has superior action of a liquid, with the convenience of a tablet[5]

Each new Creamalin antacid tablet contains 320 mg. of specially processed, highly reactive dried aluminum hydroxide gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. New Creamalin tablets are pleasant tasting and smooth, not gritty. They do not cause constipation or electrolyte disturbance.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as needed. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours.

How Supplied: Creamalin Tablets, bottles of 50, 100, 200 and 1000. Also available: New Creamalin Liquid (1 teaspoon = 1 tablet), bottles of 8 and 16 fl. oz.

References: 1. Schwartz, I. R.: *Current Therap. Res.* 3:29, Feb., 1961. 2. Beekman, S. M.: *J. Am. Pharm. A.* (Scient. Ed.) 49:191, April, 1960. 3. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:381, July, 1959. 4. Data in the files of the Department of Medical Research, Winthrop Laboratories. 5. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:384, July, 1959.

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PROGRAM

Saturday, November 4, 1961

SYMPOSIUM ON THERAPEUTICS

9:00 a.m. Business Session

10:00 a.m. Recent Advances in the Therapy of Hypertension, John H. Moyer, M.D., Philadelphia, Professor of Medicine and Chairman of the Department of Internal Medicine, Hahnemann Medical College and Hospital.

10:20 a.m. Arteritis Associated With Prolonged Corticosteroid Therapy, Paul O. Hagemann, M.D., St. Louis, Assistant Professor of Clinical Medicine, Washington University School of Medicine; Chief of Medicine, St. Luke's Hospital.

10:40 a.m. Intermission to View Exhibits.

11:10 a.m. Vancomycin in the Treatment of Staphylococcal Bacteremia, Robert Weber, M.D., Kansas City, Kansas, Assistant Professor of Medicine and Microbiology, University of Kansas School of Medicine.

11:30 a.m. Pharmacodynamics and Management of Salt and Water Retention Syndrome, John H. Moyer, M.D., Philadelphia.

11:50 a.m. Panel Discussion on Therapeutics.

12:30 p.m. Lunch and Exhibits.

GENERAL SESSION

2:00 p.m. The Business of Practicing Medicine, Mr. Horace Cotton, Oradell, N. J., Contributing Editor, *Medical Economics.*

2:40 p.m. Carcinoma in Situ of the Cervix, Ralph A. Reis, M.D., Chicago, Editor, *Obstetrics and Gynecology,* Journal of the American College of Obstetricians and Gynecologists; Professor of Obstetrics and Gynecology, Northwestern University School of Medicine.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. The Potential of Suggestive Therapy in General Practice, Gilbert B. Kelley, M.D., Savannah, Mo., General Practitioner, Member, Missouri Academy of General Practice.

3:50 p.m. Specific Diagnosis in Allergy: Inhalants and Foods, Herbert J. Rinkel, M.D., Kansas City, Allergist.

4:10 p.m. Planned Labor, Ralph A. Reis, M.D., Chicago.

4:30 p.m. Panel Discussion on General Session.

PRESIDENT'S INSTALLATION BANQUET

7:30 p.m. President's Installation Banquet.
The Scrawl on the Wall for Medicine, Mr. Horace Cotton, Oradell, N. J.

Sunday, November 5, 1961

SYMPOSIUM ON MEDICINE

9:00 a.m. A More Critical Evaluation of the Anemic Patient, Charles C. Sprague, M.D., New Orleans, Associate Professor of Medicine, Director of Division of Hematology, Tulane University School of Medicine.

9:20 a.m. Laboratory Procedures for the Doctor's Office, Robert T. Manning, M.D., Kansas City, Kansas, Associate Professor of Internal Medicine, University of Kansas School of Medicine.

9:40 a.m. Diagnostic Procedures in Adrenocortical Disorders, James C. Melby, M.D., Little Rock, Assistant Professor of Medicine and Program Director, Clinical Research Faculty, University of Arkansas School of Medicine.

10:00 a.m. Functional Gastrointestinal Disorders, Arthur P. Klotz, M.D., Kansas City, Kansas, Associate Professor of Medicine, Chief, Section of Gastroenterology, University of Kansas School of Medicine.

10:20 a.m. Intermission to View Exhibits.

11:00 a.m. Autoimmune Disorders, Charles C. Sprague, M.D., New Orleans.

11:20 a.m. Corticosteroid Therapy in Medical Emergencies, James C. Melby, M.D., Little Rock.

11:40 a.m. Panel Discussion on Medicine.

12:15 p.m. Lunch and Exhibits.

(Continued on page 1108)

ALL PHYSICIANS ARE WELCOME

Recognizing that the exchange of ideas is fundamental to medical progress, Lederle continues its Symposium program with the 10th year of scheduled meetings. Through these Symposia, sponsored by medical organizations with our cooperation, over 50,000 physicians have had the opportunity to hear and question authorities on important advances in clinical medicine and surgery. You have a standing invitation to attend any of these Symposia with your wife, for whom a special program is planned.

ANOTHER YEAR OF SYMPOSIA . . .

PROVIDENCE, RHODE ISLAND
Wednesday, November 1, 1961
The Colony Motor Hotel

HARRISBURG, PENNSYLVANIA
Thursday, November 9, 1961
The Penn Harris Hotel

JACKSONVILLE, FLORIDA
Sunday, November 12, 1961
The Robert Meyer Hotel

ALLENTOWN, PENNSYLVANIA
Wednesday, November 15, 1961
The Americus Hotel

SOMERVILLE, NEW JERSEY
Thursday, November 16, 1961
The Far Hills Inn

NASHVILLE, TENNESSEE
Wednesday, November 29, 1961
Meharry Medical College

EDINBURG, TEXAS
Saturday, December 2, 1961
The Echo Motor Hotel

WACO, TEXAS
Sunday, December 10, 1961
The Holiday Inn

Plans for 1962 already include the following Symposia, with more being arranged:

MOBILE, ALABAMA
Friday, January 5, 1962
The Admiral Semmes Hotel

ST. PAUL, MINNESOTA
January 8, 1962
The Hotel Lowry

PORTLAND, OREGON
Wednesday, January 24, 1962
The Sheraton-Portland Hotel

ANCHORAGE, ALASKA
Saturday, February 24, 1962
The Westward Hotel

WINCHESTER, VIRGINIA
Wednesday, March 14, 1962
The Lee-Jackson Hotel

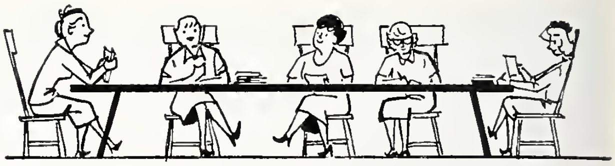
SIOUX CITY, IOWA
Thursday, March 15, 1962
The Sheraton-Martin Hotel

SPOKANE, WASHINGTON
Saturday, June 2, 1962
The Davenport Hotel

Lederle LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y.

Plan now to attend the A.M.A. Clinical Session in Denver, November 27-30

Woman's Auxiliary



Echoes of our Fall Board Meeting will ring throughout the state as our Auxiliary members are busy implementing suggestions and programs in their own areas. Congressman Durward G. Hall, our 7th District representative, sounded the keynote by stressing, "Importance of Citizenship Responsibility." Dr. Hall stressed now is the time for doctor, lawyer, merchant and chief to take time for politics. Dr. Hall believes we are prepared to meet the threats of any foreign power, but we have citizenship apathy, as a threat from within. History makes us recall that great civilizations of the past declined when apathy replaced vigor.

Mrs. Frederick E. Wade

Dr. Hall suggested our finest Auxiliary project was citizenship responsibility. He pointed out that we can do much to aid our government by being informed and participating in legislative discussion and study that will point the way to preservation of our freedom. Somehow, all of us felt better about the state of our nation, knowing that a man of Dr. Hall's caliber was serving in Congress.

Dr. J. H. Summers, President of the Missouri State Medical Association, also took time from his busy schedule to give us orientation and encouragement. Every doctor's wife in Missouri is appreciative of the self sacrifice, devotion and time given to furthering the ideals of their husband's profession by the dedicated leaders in the Missouri State Medical Association.

Our Auxiliary would like to express appreciation for what each and every physician in Missouri is doing to further the ideals of his profession. We can honestly say, it is wonderful (if often at times harassing), to be married to a physician, whose goals are not self-advancement but advancement of all mankind. Our theme for the year is, "Speak Your Beliefs in Deeds"—and to this we pledge all our efforts. We may exist in a materialistic world, but we live by our ideals —and to this your Auxiliary rededicates itself.

MISSOURI ACADEMY OF GENERAL PRACTICE

(Continued from page 1106)

SYMPOSIUM ON SURGERY

1:30 p.m. If I Had an Ulcer, Philip Thorek, M.D., Chicago, Associate Clinical Professor of Surgery, University of Illinois School of Medicine; Professor of Surgery, Cook County Graduate School of Medicine.
1:50 p.m. Fat—the Mud of Surgery, Ralph T. Bowers, M.D., Memphis, Chief of Surgical Service, Veterans Administration Medical Teaching Group Hospital.
2:10 p.m. Surgical Treatment of Cancer of the Skin, John J. Modlin, M.D., Columbia, Mo., Professor and Chairman, Department of Surgery, University of Missouri School of Medicine.
2:30 p.m. Intermission to View Exhibits.
3:00 p.m. Carcinoma of the Lung, C. Frederick Kittle, M.D., Kansas City, Kansas, Associate Professor of Surgery, University of Kansas School of Medicine.
3:20 p.m. Gallbladder Disease, Philip Thorek, M.D., Chicago.
3:40 p.m. Adrenalectomy for Hopeless Carcinoma of the Breast and Prostate, Ralph T. Bowers, M.D., Memphis.
4:00 p.m. Panel Discussion on Surgery.
4:30 p.m. Adjournment.

Volume 58, Number 11—November, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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JOHN S. CHAPMAN, M.D., *Dallas, Texas*

The Changing Epidemiology Of Tuberculosis

Indices for the estimation of the change in incidence of tuberculosis are discussed as well as the necessary follow-up procedures of detection for eradication.

Dr. Chapman is Assistant Dean and Professor of Medicine at the University of Texas Southwestern Medical School, Dallas, Texas.

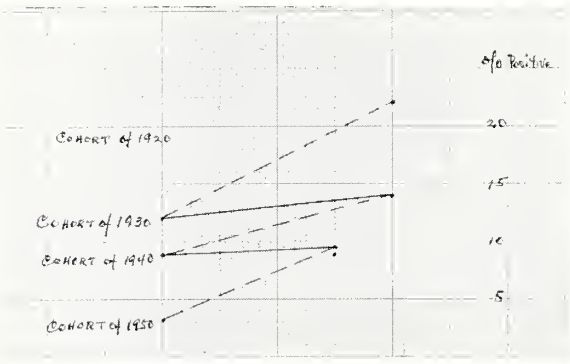
The paper was presented at the 103rd Annual Session of the Missouri State Medical Association in Kansas City.

The progress of a disease through a population may be measured by death rate, attack rate, or—since an organism such as the human tubercle bacillus leaves in the form of a positive tuberculin test a near indelible record of its presence—the infection rate. In the varying phases of the life cycle of an epidemic these several indices bear a variable relation to each other. At the height of an epidemic, for example, the attack rate is very high, the death rate is high in proportion to the attack rate, and the infection rate is practically 100 per cent. Such, indeed, was the picture in relation to tuberculosis from about 1880 to 1900. The death rate is estimated to have been 250 per 100,000 per year. Exposure rate, as measured by the tuberculin test, was almost 100 per cent of the adult population and it is probable that 65 per cent of children were tuberculin positive by the age of 12. During this time figures from the continent of Europe indicated that from 25 to 50 per cent of children with recognizable tuberculosis died.

The epidemic in the United States began to wane around the turn of the century, although in some parts of the world the indices are still high. Schwarz[1] in 1945-1946, found that 75 per cent of children in Peru were positive reactors by the time they reached 12 years of age. The waning of the epidemic in the United States proceeded to the point that by 1940, the death rate for the nation had declined to 50 per 100,000, and the shape of the curve of the decline indicated an accelerating rate of decrease.

As the death rate declined, the attack rate declined less rapidly, as did the infection or tuberculin rate. Table 1 is a composite of tuberculin reaction rates at several points for the last 20 years. It is significant that each succeeding cohort shows a lesser rate of reaction. (The term "cohort" refers to all individuals born in a particular decade.) Not only is the reactor rate lower at any given age, but the rate at which members of a cohort become positive is less for each succeeding cohort (fig. 1). Stated in another way the people born from 1880 to 1890 have the highest tuberculin skin test rate of any cohort; more members of this cohort have had tuberculosis and more have died of the disease than members of any succeeding cohort. More than this, more members per 100,000 now living have tuberculosis than have members of any other group. These general statements would prove to be true of any cohort with respect to the cohorts that followed it.

One should bear in mind that changes that occurred prior to 1948 were the result of various factors other than antituberculosis drugs. Indeed the effect of drug therapy on a broad scale began only about 1950, and the maximum effect from chemotherapy probably did not appear until 1953-1954 when isoniazid had been introduced and the proper administration and duration of treatment with this drug had become fairly well established. The effect of successful chemotherapy is manifest in the steep decline in death rate from 1950 to 1960, and the rapid change in the percentage of reactions at various ages, as well as the rate at which negative children became positive. (All figures for reaction rates are based on intradermal O.T. 1-1000 or PPD, intermediate.) These changes which are drawn from one city (Dallas, Texas), are characteristic of figures obtained in a number of other localities[2, 3] and may be considered typical of the trend. This view is supported by Palmer's report of a 5 per cent reactor rate among Navy recruits for the nation as a whole.[4]



Tuberculin rates in children from low-income areas in Dallas, Texas. The arrangement is by cohorts. Solid lines represent true increase in tuberculin reaction with increase in cohort age. Dotted lines represent the increase that would have occurred if each cohort reached the level of tuberculinization of the preceding cohort.

TABLE 1

PERCENTAGE OF POSITIVE TUBERCULIN REACTORS—DALLAS, TEXAS

Type	*Cohort*	*Test Year*	*Age*	*Per Cent Positive*	*Death rate USA, per 100,000*
Charity Clinic	1920	1939	14	22	116-70
Charity Clinic	1930	1939	6	12.3	70-47
All High Schools	1930	1948	14	17	70-47
Charity Clinic	1930	1951	12	12	70-47
Charity Clinic	1940	1951	6	9	47-21
Low Income School	1940	1957	14	9.6	47-21
Low Income School	1950	1957	6	3.3	21-6.7
High Income School	1950	1957	6	0	21-6.7
High Income School	1940	1957	14	0.5	47-21

But whereas in former years a statement in regard to a part of the population would probably be equally true of the whole or of any other part, at present generalizations for the entire population are apt to be fallacious for specific parts. Reference to the figures, for example, makes it clear that whereas in 1947 there was a 50 per cent difference in reactor rate for the most favored as opposed to the least favored person of 16 years, the difference may now be as much as 100 per cent or more. In short, tuberculosis appears to have been driven into pocketed areas, except in occasional instances.

A comparison of maps of the city in 1935 and in 1958 reveals that the relative geographic pocket of tuberculosis has remained rather constant. This area is one of deteriorated and deteriorating single and multi-family structures closely surrounding the main business district. Multi-family structures are for the most part quite large frame houses that in more prosperous days housed single families. There are dense crowding, highly unsanitary conditions and perennial poverty. Diet is poor and recreational opportunity is limited; families are large and medical supervision is scanty. Most of the inhabitants frequent charity clinics. Among these people there is a high percentage of Spanish-Americans and Negroes.

Geography alone does not describe the epidemiologic problem adequately. The reaction rate to tuberculin at the age of 6 years, 2 per cent, is identical for white and Negro children, but repeated tests have indicated the rate to be about three to four times as high in Spanish-Americans. Near the same relative proportion is true of children at 13 to 14 years of age. Contrasted with these is a tuberculin rate of 0.5 per cent at the age of 6 and of 14 years in a highly favored area in a suburban part of the city.

These figures apply to school children who are selected by their parents' willingness to submit the children to a tuberculin test and by the attendance at school on the days of testing and of reading. Perhaps if every child had received a test and a reading the figures might be slightly higher. Included among those tested were a considerable number of children whose parents or other near relatives were listed in the Tuberculosis Register. If these children alone are tested, it is found that about 60 per cent who had household contact with a case of pulmonary tuberculosis react to tuberculin.[5] Incomplete studies indicate that this contact reaction rate is largely independent of social and economic status. Hence another characteristic of tuberculosis emerges: It is a familial disease. The statement is a truism, but the significance of family contact never stood out so clearly in the past when a positive tuberculin test in a child was usual rather than relatively rare.

If attention is directed to those adults who manifest pulmonary tuberculosis, other facets of the epidemiology of the disease begin to emerge. There has been a striking increase in the average age of patients admitted to hospitals for tuberculosis. Whereas the characteristic patient from 1930 to 1940 was from 20 to 40 years of age, the present patient is 50 to 60 years of age, except in special ethnic groups in whom tuberculosis often begins in an explosive form. The proportion of elderly males is particularly striking. Complicating diseases such as diabetes, alcoholism, gastric resection and various malignant diseases are frequent among Anglo-Americans. A number of patients have received cortico-steroids for some other illness such as asthma or arthritis. The perpetually and severely socially maladjusted, criminals, addicts and mentally ill produce frequent admissions to tuberculosis hospitals.

It follows that if tuberculosis is to be eradicated, efforts at detection and follow-up must be intensively directed in certain directions, which may be listed as follows:

1. Economically and socially depressed areas.
2. Certain ethnic groups.
3. The associates, and especially, the families of cases of pulmonary tuberculosis.
4. Charity clinics and hospital wards.
5. Jails and prisons.
6. The socially maladjusted.
7. Patients with nutritional and immunologic disorders: diabetes, ulcer, colitis, malignancy.
8. Patients treated with cortico-steroids.

It is equally certain that random surveys without direction and follow-up are almost certain to be non-productive in most parts of the United States.

Finally, since it may be stated that transmissible disease occurs only in individuals whose tuberculin test is positive, careful follow-up, throughout life, of the positive reaction is a necessity. And it is probably only slightly less necessary that the tuberculin-negative individual be repeatedly and regularly followed with skin tests.

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FELIX G. FREUND, M.D., *and* **ROBERT B. DODD, M.D.,** ***St. Louis***

Factors Involved in Vomiting Following General Anesthesia

The results of a study of 1,756 unselected general surgical patients to determine the incidence of postanesthetic emesis is reported.

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This study was undertaken to determine the incidence of postanesthetic emesis in the operating rooms and postanesthesia unit of Barnes Hospital. Such information could be of value in evaluating the efficacy of antiemetic drugs.

The literature contains a number of articles concerning the use of antiemetic drugs to decrease postanesthetic vomiting. However, there are relatively few papers dealing with the causes of such emesis. Age and sex of the patient, patient's illness, site and duration of operation and anesthetic agent and technic used are some of the factors that could conceivably affect the frequency of postanesthetic vomiting. Bellville, et al.,[1] in a paper published while this one was in preparation, dealt with a number of these factors. This paper corroborates most of their findings and sets forth some additional concepts.

Method

All patients operated upon under general anesthesia in Barnes Hospital during a period of three consecutive months are included in this study. Only those operated on during the night were excepted.

The patients were observed continuously for retching or vomiting from the time the anesthetic agent was discontinued until they were discharged from the recovery unit, a period of about two hours. Retching motions or actual emesis were interpreted as vomiting. The volume of vomitus was not recorded nor considered a criterion for the severity of vomiting. Nausea was disregarded because of the difficulty of evaluating it. Results were analyzed by means of the chi square test and $P<0.01$ was chosen as the level of significance.

The usual preanesthetic medication was a combination of either pentobarbital or meperidine with either atropine or scopolamine. Thiopental, administered intravenously or rectally, was used for induction in the majority of cases. The following combinations of anesthetic agents were used: Nitrous oxide-ether, hereafter referred to as GOE; nitrous oxide-thiopental, with or without meperidine and/or trichloroethylene supplement, hereafter referred to as nitrous oxide; nitrous oxide-halothane, hereafter referred to as halothane, and cyclopropane. An appreciable number of patients having intra-abdominal or thoracic operations received a muscle relaxant, gallamine, d-tubocurarine or succinylcholine.

Results

Of the 1,756 patients, 486 (27.7 per cent) retched or vomited. The results are tabulated in table 1. Among 641 males, 136 (21.2 per cent) vomited; and among 1,115 females, 350 (31.4 per cent) did. The probability that the frequency of vomiting by both sexes is the same has a P of $<.001$. However, among males and females up to the age of 30 the incidence of vomiting was the same for both sexes. The difference between the incidence of vomiting between the sexes of all ages is consequent to the decline in frequency of vomiting among men after 30 while the frequency among women does not change. (See table 1 and figure 1.)

No real difference was found between the over-all incidence of vomiting following cyclopropane anesthesia (34.3 per cent) and ether anesthesia (44.0 per cent), nor between either nitrous oxide (11.4 per cent) or halothane anesthesia (11.4 per cent). Patients of both sexes vomited significantly less after nitrous oxide than after GOE. Table 2 compares the incidence of vomiting by sex and decade of life for nitrous oxide and GOE. Cyclopropane and halothane are not included in this table because of their small numbers, 70 and 60 respectively. The data for incidence of vomiting during the various decades of life show no significant difference between males and females in the nitrous oxide group. In the GOE group, however, the incidence of vomiting decreases abruptly among men beyond the age of 30 while it declines gradually in females as shown in figure 2. When figures 1 and 2 are compared, it is found that the sharp decrease in the incidence of males past the age of 30 vomiting is due to the decrease in vomiting following ether anesthesia. The incidence of vomiting following nitrous oxide anesthesia is similar in both sexes with aging.

TABLE 1

INCIDENCE OF VOMITING AFTER GENERAL ANESTHESIA IN RELATION TO AGE AND SEX OF PATIENTS

Life Decades	*Males*	*Vomited*	*Per Cent*	*Females*	*Vomited*	*Per Cent*
1st	142	49	34.5	112	36	32.1
2nd	49	13	26.5	39	13	33.3
3rd	42	11	26.4	132	42	31.8
4th	62	6	9.7	202	64	31.7
5th	90	16	17.8	246	82	33.3
6th	90	15	16.7	194	56	28.9
7th	94	16	17.0	122	37	30.3
8th	72	10	13.9	68	20	29.4
Age in Years						
Below 30	233	73	31.3	283	91	32.1
Above 30	408	63	15.4	832	259	31.1
	$P<0.001$					

The operative site had no ostensible influence upon the case frequency of postanesthestic vomiting following GOE anesthesia (see table 3). The number of patients that had operations upon the abdomen or head and neck under ni-

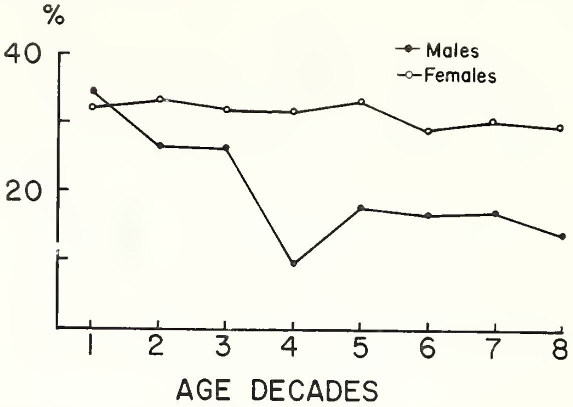

Fig. 1. Comparison of incidence of vomiting by sex and age following general anesthesia.

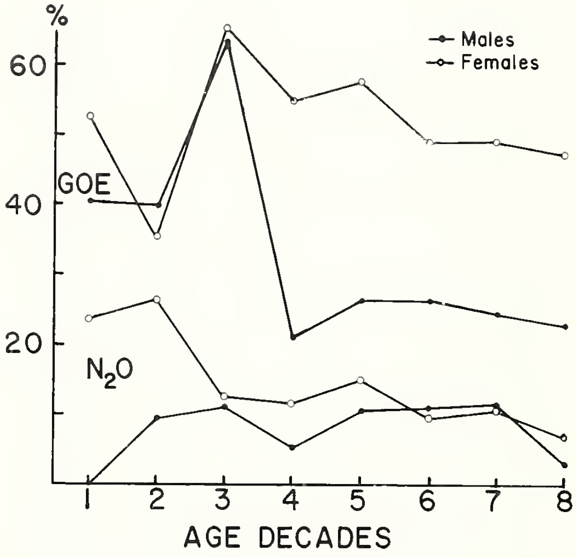

Fig. 2. Comparison of incidence of vomiting by sex and age following GOE anesthesia and N_2O anesthesia.

TABLE 2

INCIDENCE OF VOMITING AFTER GOE AND NITROUS OXIDE ANESTHESIA IN RELATION TO AGE AND SEX OF PATIENT

	GOE						*N_2O*					
Life Decades	MALES	VOMITED	PER CENT	FEMALES	VOMITED	PER CENT	MALES	VOMITED	PER CENT	FEMALES	VOMITED	PER CENT
1st	109	44	40.4	76	40	52.6	13	0	0.0	17	4	23.5
2nd	25	10	40.0	17	6	35.3	21	2	9.5	19	5	26.3
3rd	11	7	63.6	43	28	65.3	27	3	11.1	80	10	12.5
4th	19	4	21.1	84	46	54.8	38	2	5.3	104	12	11.5
5th	34	9	26.5	99	57	57.6	47	5	10.6	133	20	15.0
6th	38	10	26.3	94	46	48.9	45	5	11.1	95	9	9.5
7th	45	11	24.4	61	30	49.2	44	5	11.4	54	6	11.1
8th	35	8	22.8	38	18	47.3	32	1	3.1	29	2	6.9

TABLE 3

INCIDENCE OF VOMITING AFTER GOE IN RELATION TO SITE OF OPERATION AND SEX OF PATIENT

Operative Site and Sex	GOE NUMBER OF CASES	GOE NUMBER VOMITED	GOE INCIDENCE PER CENT
Abdomen, males	125	41	32.8
Abdomen, females	110	49	44.5
Head-neck, males	72	23	31.9
Head-neck, females	103	51	49.5
All other, males	119	39	32.8
All other, females	177	82	46.3

trous oxide anesthesia was too small to be analyzed.

The length of the anesthesia appeared not to affect the case frequency of vomiting (see table 4). The figures show a much lower incidence in the group of operations lasting less than one hour but most of these patients had nitrous oxide anesthesia. For operations lasting less than one half hour, 88.3 per cent of the patients received nitrous oxide and for cases lasting from one half to one hour, 69.5 per cent. The frequency of vomiting among patients receiving less than one half hour of anesthesia, 11.3 per cent, is almost identical with the over-all figure for patients receiving nitrous oxide anesthesia. The low rate of vomiting following short procedures seems to be a reflection of the type of anesthetic agent used and not of the duration of anesthesia.

TABLE 4

INCIDENCE OF VOMITING AFTER GENERAL ANESTHESIA IN RELATION TO DURATION OF ANESTHESIA

Duration of Anesthesia	*Number of Cases*	*Number Vomited*	*Incidence Per Cent*
Less than ½ Hour	222	25	11.3
½ to 1 Hour	450	79	18.6
1 to 2 Hours	560	187	33.4
2 to 3 Hours	283	114	40.3
3 to 4 Hours	144	45	31.2
4 to 5 Hours	60	24	40.0
More than 5 Hours	37	12	32.5

DISCUSSION

During the last 60 years there has been a steady decrease in the reported frequency of postoperative vomiting. Blumfeld[2] (75 per cent in 1899); Mackenzie[3] (70 per cent in 1929); Waters[4] (40 per cent in 1936); Davies[5] (44 per cent in 1941); Bonica[6] (30.5 per cent in 1959); Smessaert[7] (24.3 per cent in 1959), and Bellville[8] (19 per cent in 1959). It appears that the severity of vomiting has also decreased over these same years.

Although we do not know why some persons vomit after anesthesia and others do not, it appears that the decrease in the rate of postanesthetic vomiting has occurred while the technic of administration of anesthesia has improved. Bellville[1] found that, in patients receiving an inhalation agent, the highest incidence of nausea and vomiting was in those who received it by mask as compared to the endotracheal route. Improvements of preoperative preparation of the patient, in management of fluid and electrolyte balance and knowledge of drug effects in man have markedly reduced the incidence and duration of serious hypotension during surgery. Hypotension during surgery has been found to increase the incidence of postoperative vomiting.[1] Another factor appears to be the skill and and experience of the anesthetist.[1] The roles played by ether, chloroform and cyclopropane have steadily declined while less emetic inhalation agents such as nitrous oxide and halothane and the intravenous agents have steadily replaced them. The ultra-short-acting barbiturates produce a pleasant and fast induction of sleep. Davies'[4] study showed that GOE anesthesia was followed by less vomiting when thiopental was used for induction. Knapp and Beecher[9] found that pentobarbital given postoperatively also offered some protection against vomiting. In addition, the muscle relaxants have made it possible to use much lighter levels of anesthesia for operations that would otherwise require deep anesthetization with ether or cyclopropane. Whether the frequency of vomiting following either ether or cyclopropane is the same[6, 10, 11, 12] or different,[1] the incidence is consistently reported[1, 5, 6, 7, 10, 11, 12, 13] to be much higher than the combination of nitrous oxide-thiopental. Our results are in agreement with them. It has been claimed[6] that the addition of narcotics to the nitrous oxide-thiopental combination increases the incidence of vomiting. We did not investigate this.

There have been conflicting reports[1, 6, 7, 9, 12, 13, 14, 15, 16, 17] concerning the influence of age, sex, operative site and duration of operation on postanesthetic vomiting. We find that age and sex had a significant effect on the incidence following GOE, but not following nitrous oxide. Following GOE, the frequency of vomiting was greater in women of all ages and in men under the age of 30 than it was in men past the age of 30. It has been reported[1] that in women after the eighth decade of life the incidence of postoperative vomiting approaches that seen in man. This is presumably due to the low gonadotrophin level found in women of this age group. Our data do not reflect this, but we had relatively few female patients over the age of 70 in our series. It is commonly felt that handling of intraperitoneal viscera increases postoperative vomiting and that operations on the head and neck are also followed by a high incidence of vomiting. Our series of GOE anesthesias show no significant differences between the three categories: abdominal, head and neck and all other operative sites. Knapp and Beecher,[9] who studied only patients receiving GOE, arrived at a similar conclusion. We think that the divergent reports of various authors are due, in part at least, to the fact that the effect of the different anesthetic agents was not separately considered. The more emetic agents, ether and cyclopropane, were not used in a sufficient number of short cases in our series to contest Belleville's contention[1] that the incidence of postoperative vomiting increases with increasing duration of anesthesia. His data for cyclopropane are convincing.

We agree with Keats[16] who opposes the routine use of a preoperative antiemetic. He reasons that from 80 to 90 per cent of patients receiving such drugs would be treated unnecessarily, since about 70 per cent of them would not vomit even without an antiemetic drug and the antiemetic drugs would not be effective in from 10 to 20 per cent of them. Less than 30 per cent of our patients vomited and none of them received a preoperative antiemetic. Even with GOE about 60 per cent of the patients get through the immediate postoperative period without vomiting.

SUMMARY

The incidence of vomiting following general anesthesia and surgery was determined in 1,756 unselected general surgical patients. The overall incidence of vomiting was found to be 27.7 per cent. The most important factor was the anesthetic agent used, the incidence being 44 per cent following ether anesthesia versus 11.4 per cent following nitrous oxide anesthesia. When ether anesthesia was used, the most important factors were the sex of the patient and, in males, the age of the patient. In this study, site of operation and duration of anesthesia were not significant factors in the incidence of postanesthetic vomiting.

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Intermittent Pyloric Obstruction From Persimmon Bezoar

A case report of phytobezoar from ingestion of persimmons is presented, together with discussion of diagnosis, pathophysiology and treatment.

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Most phytobezoars are caused by the ingestion of unripe persimmons[18] and although bezoar from the ripened fruit has been reported this is less common. The unripe fruit has a pungent taste and an astringent effect upon the lips and mouth. The common wild American persimmon, *Diospyros virginiana*, is distributed from Connecticut to Iowa, and south to the Gulf of Mexico. The bezoar is usually found in young men who have consumed the wild unripe fruit while engaged in some outdoor activity, i.e., hunting, fishing or camping. Reported cases are relatively infrequent. O'Leary, in 1953, reviewed 14 cases with analyses of 46 collected cases from the literature.[15]

Case Report

Mr. L. B., a 43 year old Negro laborer, was admitted to the hospital with a complaint of intermittent abdominal pain and vomiting. At the time of admission he was unable to retain either food or fluids. In the past he had not vomited daily, but would at times be free of intermittent abdominal pain and vomiting for a month or two. Past history contributed a history of a hunting trip every fall with the ingestion of about a dozen persimmons. He denied eating the seeds. A barium meal (fig. 1) showed large multiple rounded densities interpreted as bezoar or a large polypoid neoplasm. He was transferred to the surgical service. A preoperative diagnosis of phytobezoar secondary to the ingestion of persimmon was made.

Exploration of the abdomen revealed a large hard mass. The stomach was opened and found filled in a cast-like fashion with phytobezoar. Some portions of this material appeared to be older than others, and it is possible that the bezoar had accumulated over a period of several years.

Figure 2 demonstrates the masses removed from the stomach. Three separate bezoars were found. These masses could be manually placed together

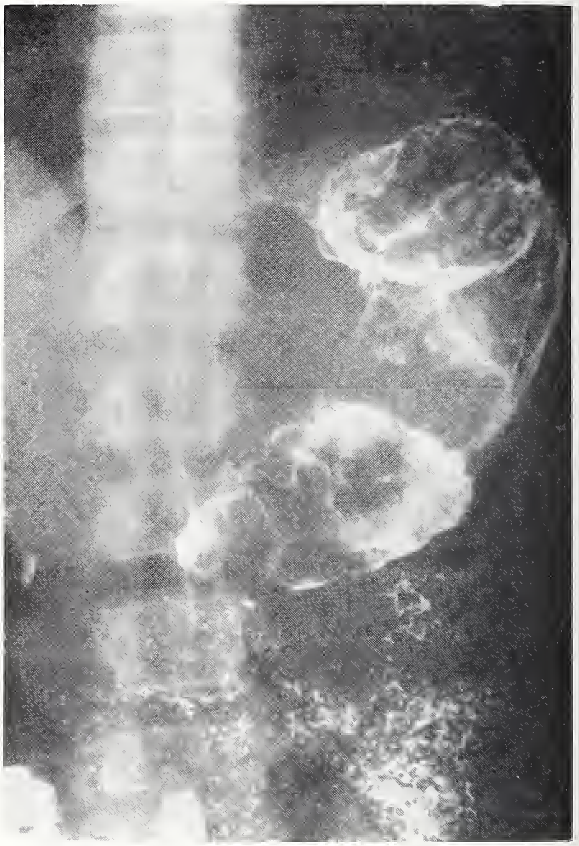

Fig. 1. Upper gastrointestinal tract. The stomach contains large rounded masses having the appearance of bezoar, although polypoid neoplastic lesion cannot be excluded. This film taken one hour after the barium meal shows a good deal of residual material in the stomach. The head of the barium column is in the ileum.

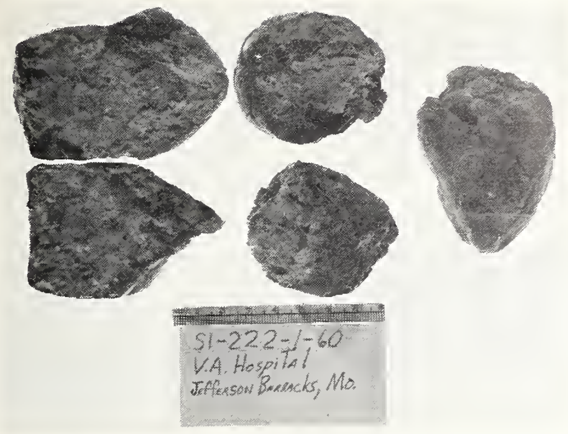

Fig. 2. Phytobezoar after removal from the stomach. Centimeter rule indicates size. Three masses were found, the mass on the left, and the one in the center have been transected.

to form a "J" shaped cast of the stomach carrying the impressions of the gastric rugae on its surface.

The patient recovered from laparotomy and gastrostomy without incident, and is now completely free of obstructive symptoms.

DIAGNOSIS

Diagnosis may be difficult if the possibility of bezoar is not kept in mind. Detailed history taking is helpful in confirmation of the diagnosis. At times, the gastric mass can be felt on direct examination. The radiologic appearance of the mass is fairly typical, but gastroscopy may be necessary to rule out a neoplastic lesion.[3, 4, 5, 6, 7, 8]

PATHOPHYSIOLOGY

Izumi and Chont[1, 2] have investigated the problem of persimmon bezoar formation. The unripe fruit contains shiboul or phytotannin composed of phloroglucin and gallic acid. Gastric juice or 0.1 N. hydrochloric acid solutions react with this material to form a sticky insoluble coagulum. The reaction does not take place in water, or in an alkaline medium.

The swollen mass is too large to pass the pylorus, as a rule, and too firm to be extruded by gastric peristalsis. The bezoar can act as an irritant, producing single or multiple ulcers, edema, gastritis, bleeding or perforation.[9, 13] Pyloric obstruction can ensue, as in this case. Others have reported bezoar causing small intestinal obstruction, and even the entrapment of bezoar in Meckel's diverticulum.[10, 11]

TREATMENT

In early cases, medical management may be effective.[14, 15] Dann devised a program utilizing papain and sodium bicarbonate, the mixture being administered every three hours until radiologic examination shows dissolution of the mass.

Surgical treatment consists of anterior gastrostomy with removal of the mass. The small intestine should be carefully examined so that there is no complication of small intestinal obstruction from a fragment of the larger mass. Gastric ulceration heals promptly when the irritating bezoar is removed.

SUMMARY

1. Among the great number of persons who eat unripe persimmons, there is an occasional case of bezoar that produces distressing gastric symptoms, and can simulate peptic ulcer disease or gastric neoplasm.
2. Radiologic diagnosis is fairly accurate.
3. Bezoar can be differentiated from polypoid neoplasm preoperatively by gastroscopy.
4. Some early cases may respond to medical treatment with papain and sodium bicarbonate.
5. In most cases exploratory operation and anterior gastrotomy are necessary to remove the bezoar.

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The Ocular Problems of Some Famous Men

Special Article

This presentation was the winning essay in the second annual McComas Memorial Medical History Essay Contest, University of Missouri School of Medicine.

Many prominent historical figures suffered from various types of major and minor disorders of the eyes. It is a well known and documented principle that physical frailty may act as a spur in the side of latent achievement. The production of a masterpiece in art, literature, or music or the winning of a decisive military campaign may be the final expression of an inner force which received its impetus and had its conception in the existence of physical defect.

The eyes are the organs through which one perceives the world about him. They represent probably the most important instrument in the acquisition of knowledge that man has for, as has been stated, "seeing is believing." Impaired or lost vision has been the lot of many important personages. The effect of damaged vision on the lives of these people has manifested itself in many different and interesting ways. On some the lack of sight has been responsible for the development of greater insight. On others the effect has perhaps been one of little or no consequence. In any event, however, the ophthalmic disturbances of these men offer subject matter for interesting and fascinating reading. Much of what has been written on the visual problems of some of our famous predecessors is really speculative in nature and has arisen out of a more complete body of knowledge which modern day Ophthalmology has given. Thus, the pastime of making retrospective diagnoses is not only a good academic exercise, but also constitutes a means where in one may throw some light on the character and motivation of the lives and work of these famous figures.

Nero, the Roman emperor, supposedly was the victim of weak eyes and it is said that he used some type of cut emerald so that he might observe the gladiatorial contests in the Roman Colosseum. Presumably no accurate conjectures have been made as to the nature of his ocular disturbance.[6] Hannibal, it is claimed, lost an eye after he crossed the Apennines into the valley of the lower Arno in 217 B.C. In a retrospective view one is most apt to suppose that Hannibal suffered a severe corneal ulceration following the fatigue and exposure of his Alpine passage.[6]

Benvenuto Cellini[4] (1500-1557), the famous Italian goldsmith and sculptor, describes in his autobiography how he narrowly escaped the loss of vision in an eye as the result of an injury sustained at his work. It seems that Cellini was struck in the right eye by a splinter of steel while sharpening some of his chisels. Fearing that he might lose sight he consulted a famous surgeon whose treatment consisted in cutting a great vein in a pigeon's wing and allowing the blood to spurt into the injured eye. Cellini then writes that he obtained an almost immediate cure with complete restoration of vision. In retrospect it would seem that the splinter probably did not penetrate the globe but merely thrust itself between the corneal lamellae. Discharge of the splinter was most likely achieved by exfoliation of the anterior layers of the cornea.

In 1900 a noted German ophthalmologist, Professor Herman Cohn, found a lorgnette in the house of the famous German poet, Johann Wolfgang von Goethe. Since this had a two diopter concave lens Cohn reasoned that Goethe was most certainly nearsighted. In letters written to friends and family Goethe tells that he never used glasses to read with and in fact frequently manufactured excuses for not wanting to wear eyeglasses. He expressed a dislike for people who wore glasses and once said "He who looks through glasses thinks he is smarter than others." From this attitude one would suppose that glasses were a symbol of prestige amongst a class of pseudo-intellectuals and pseudo-sophisticates of that day. At one point in his life he said, in reference to the use of spectacles, that "I see more than I want to see." Yet in his literary works Goethe reveals that his "vision" of the human predicament was equalled by few.[11]

Preliminary to the discussion of the eyesight of some Renaissance artists, it should be noted that the descriptions of things perceived by the human eyes vary widely and there are as many variations as human faces, mannerisms or fingerprints. The system of testing visual acuity in use today was evolved in the latter part of the 19th century and F. C. Donders of The Netherlands was one of the most celebrated ophthalmologists in this connection.[1] It was he who first demonstrated that the human eye has the strongest power of refraction in the vertical axis which results in the eye seeing the width of objects more or less exaggerated, i.e., wider than they really are. Donders termed this defect astigmatism with-the-rule since it is most common. When the refractive power of the eye is stronger in the horizontal axis—making objects appear thinner than they really are—the defect is called astigmatism against-the-rule. In some cases the refractive power may be stronger in some position other than the vertical or horizontal axes; in this instance it becomes an astigmatism with an oblique axis.

In the Renaissance period correction was available for presbyopia and hyperopia but astigmatism was not investigated and aided until the latter part of the 19th century. Ahlstrom, in attempting to define the astigmatic defects of some Renaissance artists made an extensive study of their paintings. Included in this study were Leonardo da Vinci, Hans Holbein, Lucas Cranach and El Greco. He goes on to conclude that there were great differences in these artists' ways of seeing things. He divides them into the normal and astigmatic groups. Leonardo da Vinci is classed in the normal eyesight group, whereas Holbein, Cranach and El Greco fall in the astigmatic group.

Hans Holbein (1497-1543) began his painting career in Basle, then later journeyed to England where he was readily accepted and became a court painter to Henry VIII. He died of the plague at age 46 years. The distinctive mark of his paintings is the portrayal of his subjects as broad and robust. His portraits of Henry VIII display massive breadth of chest whereas his painting of Christ reclining depicts an "incredibly long slender" person. This justified the conclusion that Holbein saw all objects as distended laterally—in other words he had the refractive defect known as astigmatism with-the-rule.

Lucas Cranach (1472-1553) was also a court painter, but in Wittenburg, Germany. In his portrait figures there is great variation in their configurations. One outstanding characteristic, however, is the decided slenderness of most of the subjects. In other words it would seem that Cranach perceived objects as being thinner than they really were, i.e., his defect was astigmatism against-the-rule.

El Greco (1548-1614) was a follower in the painting tradition of Titian and Tintoretto. He lived and worked in Spain in the city of Toledo. His style was highly individual, full of drama and bizarre flights of imagination. In fact, some of his portraits are even frightening. In many of the figures one can see depicted clearly an uneasiness or nervousness or restless angle of posture to the body. Ahlstrom[1] is able to postulate that there is a uniformity in figure positioning in many of El Greco's paintings, i.e., that many of them appear to be leaning or gliding toward the right. His conclusion is that El Greco had an astigmatism with an oblique axis.

In attempting to prove his ideas regarding the astigmatic errors of these three artists, Ahlstrom even went so far as to invite several observers to view the works of these masters through concave cylindrical lenses. All the observers were said to have normal eyesight. The net result was that Holbein's subjects acquired normal proportions when viewed through a concave cylinder lens placed at an axis of 90 degrees or vertical, correcting as it were his tendency to see things as distended laterally. The work of Cranach took on normal proportions when the cylinder lens was placed at an axis of 180 degrees or horizontally. El Greco's figures became of normal dimensions when the same lens was held at an oblique axis of 15 degrees.

If Holbein, Cranach and El Greco had lived in the present time they undoubtedly would have been fitted with corrective glasses in childhood, leaving them perhaps with normal eyesight; but if such had been the case they would have never produced those strange and highly individual masterpieces that grace art galleries today.

In turning attention away from the Renaissance period to 18th century England, one finds that Sir Joshua Reynolds was the leader of a school of painting in an era when portrait painting was at its zenith.[12]

Reynolds was born in 1724, the son of a clergyman-schoolmaster. He first had aspirations for the medical profession and was apprenticed as a young man to a general practitioner "apothecary" at Plymouth. His ambition changed and at age 17 he was apprenticed to a portrait painter. In 1746 Reynolds secured passage to Italy to spend two years in Rome studying the old masters. In 1748 he returned to London, took up residence in a neighborhood near the famous John Hunter and embarked on a fashionable career of portrait painting. He became one of the social "lions" of London and in 1769 he was knighted. Life continued on a smooth pace until July 13, 1789, when Reynolds had the symptoms of uneasiness and the sensation of a veil falling over his left eye. He became alarmed and ceased painting. In 10 weeks the sight had gone from the left eye and he became quite anxious about losing the right. The complaints were ascribed to *gutta serena* (archaic terminology meaning blindness without visible defect in the eye). Nothing seems to have been done in the way of further diagnosis and treatment. In 1790 he had the symptom of great pain in the left eye and again marked concern and apprehension over the right eye. A depressive reaction set in and in December 1790, he gave his last discourse to the Royal Academy. In July, 1791, two years after the onset of symptoms, the disease had made considerable progress. His left eye was much inflamed and appeared "as though extravasated blood protruded from it." Leeches were applied to the eye but they failed to afford any relief of the pain and swelling which persisted until his death.

By 1791 it has become apparent that Reynolds was suffering from an associated, generalized systemic disease but no attempt had been made to ascertain its nature. In an effort to explain the difficulties encountered in diagnosis and treatment, one could point out that in that time the general body of physicians and surgeons did not understand the diseases of the eye and the subject was largely abandoned by hospital surgeons and turned over to the "oculists." Ocular surgery was reduced to a low ebb as these "oculists" were, in fact, irregular practitioners with no scientific training and likely to be itinerant in their practice.

Finally in 1792, Sir Joshua, who had been compelled to take to bed, was seen by Dr. Charles Blagdon, a naval surgeon, who stated that Reynolds' complaints were the result of some "affection of the principal viscera." Consultation was sought and it was then discovered that the liver was enormously enlarged. Reynolds died on February 23, 1792. Postmortem examination showed the liver to be twice its normal size, pale yellow and of a cirrhotic consistency. The right optic nerve was "shrunk and softened" more than usual and there was some excess water in the ventricles of the brain. The left eye was not examined at necropsy. Several biographers have raised the possibility, in view of the enlarged liver, of a nonpigmented sarcoma of the choroid. MacDiarmid[12] postulates two possible diagnoses: the most probable being an unpigmented malignant melanoma of the choroid of the left eye which as it grew produced retinal detachment and later secondary glaucoma and hemorrhage with liver metastases producing the fatal outcome. A less likely possibility would have been a hemorrhagic lesion years earlier, i.e., small cerebral thromboses, followed in 1790 by a thrombosis of the left central retinal vein which destroyed the retina. This led to a secondary hemorrhagic glaucoma with its intractable pain. This diagnosis does not take into account the liver disease and is therefore less tenable.

Samuel Johnson,[18] the eminent biographer, lexicographer and essayist of 18th century England, was a famous contemporary of Reynolds. Unlike Reynolds he suffered from visual troubles most of his life. We have his own account that he had serious eye trouble as an infant and was taken to London at two and one half years of age to be touched by Queen Anne for the "king's evil." It is known that Johnson had tuberculous adenitis (scrofula) and that, from that time forth, the vision in his left eye remained grossly defective, or as he put it, "the dog (left eye) was never good for much."

The most probable diagnosis according to Beattie[3] of his infantile eye trouble was phlyctenular conjunctivitis involving the left side to greater extent. In view of the large amount of reading and writing done by Johnson during his life, it seems unlikely that there could have been much scarring of the right eye. Other writers have suggested attacks of recurrent iritis or keratitis but, whatever the nature of the disease, the amount of residual damage was not incapacitating because he continued to devour books and write until his death at age 75 years.

Reynolds indicates, through a portrait of Johnson at age 66 holding a book close to his eyes, that he was probably nearsighted. Johnson's friends were accustomed to regard him as shortsighted and he himself acknowledged this defect on repeated occasions. Another portrait by Reynolds at age 73 is noteworthy in that the supposed bad left eye is not divergent, a fact which would seem to indicate that Johnson retained reasonably good visual function in that eye.

Beattie[3] in discussing Johnson's eye problem points out the difficulty in reconciling his supposed nearsightedness with his proven ability to observe the details of distant objects. Beattie also indicates that Johnson never wore concave lenses even though they were in use at that time and worn by his friend Sir Joshua Reynolds. To quote a remark of Johnson to his friend Garrick: "I'll come no more behind your scenes, David, for the silk stockings and white bosoms of your actresses excite my amorous propensities." Beattie asks if this observation could be made with a myopic error of 4 or 5 diopters. It is said that a nearsighted person (myope) unaccustomed to glasses will often display considerable ingenuity in the interpretation of blurred objects. Why then should one accept as evidence against a few diopters of myopia, Dr. Johnson's masculine response to the allurements of those actresses?

When John Milton[10] died of gout in 1674 he had created for himself an eternal chapter in the annals of the world's greatest poets. This literary genius slowly and painlessly went blind between the ages of 36 and 44 years. Milton's blindness has been discussed to a considerable extent by several biographers, among these, Sorsby.[17] The most frequent reason given for his blindness is glaucoma but the one serious objection to this theory, according to Sorsby, is that one of the earliest symptoms was loss of temporal field vision in one eye. In Milton's own words: "It is ten years, I think, more or less since I felt my sight getting weak and dull . . . not very long after, a darkness coming over the left part of my left eye (for that eye became clouded some years before the other) removed from my vision all objects situated on that side . . . inveterate mists now seem to have settled in my forehead and temples, which weigh me down and depress me with a kind of sleepy heaviness." Milton went on to describe episodes of headache, nausea, irritability and curious color sensations. He attributed the onset of the visual difficulties to his habit of studying late at night while in school.

His blindness brought agonizing reappraisal. Wilson,[19] another biographer, feels that Milton suffered a "reactive depression" upon becoming blind and that at this time he also gave up writing prose and returned to poetry. He (Wilson) goes on to state that the anger and frustration felt by Milton over his blindness was not to bring about defeat but was suppressed from his prose, only to be sublimated in his poetry.

Lambert Rogers[13] makes a conjecture on the possible diagnosis, attempting not only to account for the failure of his vision but also the frontal headaches, color sensations and personality changes that he underwent. His impression is that Milton suffered from some sort of parapituitary tumor (e.g., suprachiasmal cystic tumor) which produced chiasmal and hypothalamic pressure. This diagnosis is certainly more compatible with the symptomatology and history than glaucoma or retinal detachment, as some have proposed. As further evidence in support of his diagnosis, Lambert cites a patient of his own who gave a clinical history remarkably similar to Milton's and on whom an operation disclosed a parapituitary cyst.

Another literary figure who had visual problems was James Joyce.[8] When he died of peritonitis and a perforated duodenal ulcer in Zurich in 1941, after having spent a life of self-imposed exile on the European continent, Joyce, a native of Dublin, had already established himself as one of the greatest figures in twentieth-century literature.

Joyce's monumental work "Ulysses" is often acclaimed as the greatest novel of the twentieth century. This book alone required eight years and about 20,000 hours of writing for completion. Another novel, "Finnegans Wake," took 17 years to complete. Joyce was the first author to make successful use of a literary technic called the "stream of consciousness" which refers to a "steady, uninterrupted flow of thoughts, memories, associations and emotional reactions in the consciousness of a person at a given time." In "Ulysses," Joyce's reproductions of the sights, sounds and smells of Dublin and the thoughts and feelings of its inhabitants are vividly and masterfully executed.

Few realize that the "stream of illness" of Joyce's life was the chronic recurrent trouble with his eyes. Although never totally blind he suffered from near-blindness the major part of his life. Like his predecessor, Homer, the "blind bard" of the "Iliad" and the "Odyssey," Joyce had visual problems going back to his childhood. In 1888 as a 6 year old pupil in a Jesuit school he was described as "small with thin long arms . . . almost effeminate hands" and as having "weak eyes covered with spectacles." Probably the onset of his serious visual difficulties can be dated to the years 1902-1903 when, while in Paris, he first suffered from ferocious toothaches. He neglected this condition of his teeth and in 1907 developed rheumatic fever. This was followed by the first of a series of attacks of iritis, an ailment which was to plague him for the next 18 years. In 1923 most of the abscessed teeth were extracted and subsequently there was a marked reduction in the frequency of attacks of iritis. However, these attacks laid the groundwork for later complications. Joyce himself made frequent references to his eye diseases in letters written to friends while in Switzerland working on "Ulysses." In the period from 1915 to 1917 some of his comments were: "I am still under doctors' care and rather depressed that the eye attack—possibly on account of the infamous weather—

is lasting so long. . . . I hope that my eyes will soon allow me to set to work again, if only for a short time, on "Ulysses."

In 1917 he suffered a sudden, agonizing painful attack in the right eye. The diagnosis was glaucoma. Subsequently, an iridectomy was performed and for several weeks he was obliged to remain in a darkened room unable to read or write. In 1920 while in Paris he again had a series of attacks of iritis culminating in one of such severity that he "rolled on the floor in extreme agony." Gorman,[9] a biographer of Joyce, states that from that point on the fear of blindness was perceptible in the writer's behavior: "It was a terrible predicament for a writer (especially one who has based so much of his work on careful observation) and one should bear this in mind when these years in his life are considered."

In 1922 a secondary glaucoma became manifest in the left eye. Subsequent to this cataracts developed and in the four-year period from 1923 to 1926 he underwent seven different operations on the left eye. The lens extraction in that eye was complicated by scarring to such a degree as to result in almost total occlusion of vision. A further complication in the form of episcleritis occurred in 1925. In the ensuing years until 1929 Joyce subscribed to almost every type of treatment that was suggested by the ophthalmologists. These included the use of aspirin compounds, the belladonna derivatives, iodic blood cures, vapor baths and even leeches but still the progressive deterioration of his vision could not be halted. Additional references to his ocular status can be found in a personal letter written in the twenties, e.g., ". . . I am writing this with one eye shut. There seems to be very slight improvement in the vision of the left eye (Sept. 1922), . . . if only I could wake up and find myself operated upon."

In 1930 he underwent the ninth operation, performed by Dr. Alfred Vogt, internationally known ophthalmologist of Zurich. Subsequently, he had a tenth and then an eleventh operation. Joyce never went completely blind, retaining the ability to read newspaper headlines and scrawl his own writing on large strips of paper. The extremes of anguish and suffering that Joyce went through will probably never be known but it seems important in this connection to emphasize the role of somatopsychic influences in his life. The psychosomatic aspects of disease are well recognized, but what is often overlooked is the profound influence the diseased body exerts in the determination of feelings, thoughts and behavior. As Dr. Fabricant[8] states, "It is impossible to understand the human mind without taking into account the body with which it is indissolubly linked."

If Joyce was able to produce artistic works of genius in spite of this grievous physical handicap, it might seem reasonable to suppose that, without this thorn in the flesh, he would have achieved something greater. Such an assumption is not always justified. Perhaps his genius as a writer may be, in large measure, ascribed to the ocular diseases from which he suffered. We shall probably never know.

One of the more colorful historical figures who suffered from impaired vision was Sir Horatio Nelson. Several biographers have indicated that if Nelson had not died when he did he would in all likelihood have been completely blind a few years later.[15, 19]

His visual problems began in 1793 when the French revolutionaries declared war on Great Britain. Nelson sailed on the *Agamemnon* to the Mediterranean where at the seige of Calvi in Corsica an enemy shot struck a battery beside him, throwing up splinters and stones which bruised and cut his face, especially around the right eye. The attending physician's statement indicated a wound of the right iris with accompanying unnatural dilatation of the pupil and marked decrease in vision. Nelson was able to perform additional duties even on the day of injury and the next day was at his post as usual. James Kremble[12] in 1933 theorized that the concussive violence of the blow on the right side of the head and face produced detachment of the retina. If the eye had been damaged severely enough to cause immediate loss of sight it probably would have incapacitated him longer than it did as well as leaving some visible evidence of the damage. Nelson, himself, indicated in a letter to his wife that the loss of sight was not to be perceived unless told. He did say that he was able to distinguish light from darkness but as to all purposes of use the eye was gone.

In the ensuing three years before he presented himself to the Court of Examiners Nelson was wounded twice more; once in the left side of the abdomen and another time in the right arm which occasioned an amputation.

It was at one of the first meetings of the newly organized Court of Examiners of the Royal College of Surgeons of England that Sir Horatio appeared on January 5, 1797, to gain an opinion of the surgeons about the injury to his eye which had been sustained three years previously. The purpose of such an examination was to determine the amount of superannuation of compensation for wounds and to estimate the degree of disability and approve the amount of expense incurred in treatment. Nelson received one thousand pounds per annum for the loss of an eye and an arm. Again he went back to sea.

In 1798 he won the battle of the Nile. The news took considerable time in reaching England but its effect on public morale was tremendous since it was Napoleon's first setback and was comparable to the effect of the Battle of El Alamein in our own time. Nelson was back in London in 1800 where he was promoted to Vice Admiral. His eye began to cause him additional trouble at that time although it appears from a letter written to Lady Hamilton that it must have been the left eye. He states "my eye is like blood and the film so extended that I only see from the corner farthest from my nose." In 1803 he again complained that the "good" left eye was failing. A Dr. Moseley, who had treated him for typhoid 20 years earlier, advised an operation on the left eye. Nelson agreed but the surgeon reconsidered and refused to undertake the operation.

Again in 1804 Nelson wrote, "I can every month perceive a visible (if I may be allowed the expression) loss of sight." From this point on he made frequent references to the state of his physical health. He complained of pains in his head, side and back; of sciatica and rheumatic disease. Add to this the fact that he was plagued with seasickness all his life, that his best barometer was his amputation stump and that he still had attacks of malaria, and one can appreciate his concern over his health. In October 1805, came Trafalgar and his famous death.

MacDiarmid[12] states that Sir Horatio was a man who, in the modern enlightened era, would quite probably never have been accepted for naval service at all—being a small frail boy who subsequently developed into a small frail man and who probably should have been permanently pensioned out after losing his arm. He goes on to say that the eye injury was more than likely similar to those seen in the last war after landmine explosions, i.e., a hemorrhagic retinal lesion with possible rupture of the choroid but without actual perforation or intraocular foreign body. It would have been possible for a retinal detachment to have resulted as postulated by Kremble but MacDiarmid feels that if this had been so the lens would have become noticeably cataractous during the remaining 17 years of his life. There is no record of an obvious cataract nor was the eye ever described as being divergent. The question of what happened to the left eye is something else. I could have been a quiet cyclitis without definite signs of sympathetic ophthalmia. MacDiarmid doubts this and believes instead that the answer lies in the long years of naval service in the tropics—bilateral pterygia. A portrait of Nelson in the National Portrait Gallery confirms this, as it shows very discreetly a pterygium or the beginning of one in both eyes. This could account for Nelson's attacks of inflammation and for his known sensitivity to glare. This might also explain why Moseley deferred the operation on the left eye even though Nelson agreed to it. As for Nelson's repeated complaints about progressive visual failure, one could always raise the likely possibilities of an antecedent refractive error or an uncorrected presbyopia. The conclusion is that had Nelson lived he might possibly have gone blind as the result of advancing pterygia.

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J. H. Summers, M.D.

President's Message

While the session of Congress which closed on September 27 was not without pitfalls for the private practice of medicine, it is likely that the new session which will begin January 10 will have the same and possibly more problems. That session will lead directly into the 1962 Congressional election campaign.

Usually it is the Senate that has been "conservative" but in the recent session, the House was the conservative body. And, in the coming election, Republican leaders hope that the grip on the House will be strengthened by the outcome of the 1962 election.

U. S. News & World Report comments "Medical care for the aged under Social Security also is on the Administration's list. As vote getter in November, this may have a better chance than some other Kennedy proposals, but it plainly is to be the center of a hard-lobbied controversy."

Much points to this connection of the next session of Congress and the November elections. This makes it of greatest importance that Congressman know the wishes of their constituents, not only those of the medical profession, but of patients and friends.

January 10 is just a little more than a couple of months away, and while Congress is adjourned is the best time to let Congressmen know the sentiment at the grass roots—and for physicians to see that patients and friends have a real understanding of the King-Anderson bill.

J. H. Summers, M.D.

EDITORIALS

A.M.A. CLINICAL SESSION IN DENVER

The 15th annual clinical meeting of the American Medical Association will be held November 26 to 30 at Denver, with a program geared to basic problems of medicine faced by physicians in their practices.

An outstanding scientific program, with emphasis on new research developments, has been planned under the direction of Samuel P. Newman, M.D., Denver, chairman of the A.M.A.'s Council on Scientific Assembly.

Some highlights will include sessions and papers on such important areas of medicine as genes and chromosomes, electronics and computers in medicine, space medicine, medical aspects of American habits, new developments in virology, treatment of radiation injuries, new findings in chemotherapy for cancer and latest data in the field of antibiotics and antigens.

With more and more nuclear reactors coming into use, many practicing physicians soon may begin to face the problem of treating injuries from radiation accidents, the chairman said. A section of internationally known experts in the treatment of radiation injuries will offer three major papers in this area of medical care. Chairman will be Marshall Brucer, M.D., chairman of the medical division, Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tenn.

Radiation experts will discuss such topics as "Potential and Probable Sources of Radiation Accidents," "Diagnosis and Pathology of Radiation Injury" and "Treatment and Prognosis of Radiation Injury." Participants will include researchers from Los Alamos and Oak Ridge, the Office of the Surgeon General and the University of Chicago.

The age of advancing physical science also offers new findings to medical science: the use of electronics and computers in medicine. Chairman of this section at the Denver meeting will be A. H. Schwichtenberg, M.D., head of the department of aero-space medicine, Lovelace Foundation for Medical Education and Research, Albuquerque, N. M.

Computer systems for recording medical data to aid the physician in his diagnosis and prognosis will be discussed. Topics will include "The Future of Electronics in Medicine," "Microelectronics and New Concepts of Dioinstrumentation," "A System for Medical Data Recording," and "Biological Computers."

The virus will be the subject of a series of papers by outstanding specialists. Jonas E. Salk, M.D., Pittsburgh, will give a paper on "Immunization Against Virus Diseases." Other topics will include "The Nature of the Virus and Its Cellular Reaction," "Smallpox Vaccination Complications," "Virus Hepatitis" and "Identification of Viruses."

"The program," Dr. Newman said, "is designed to assist the physician in his practice. The latest findings in many areas of medicine will be presented by men who are top specialists in their fields. The meeting will be of great value to the clinician in advancing his knowledge."

INTEREST IN CIVIL DEFENSE GROWING

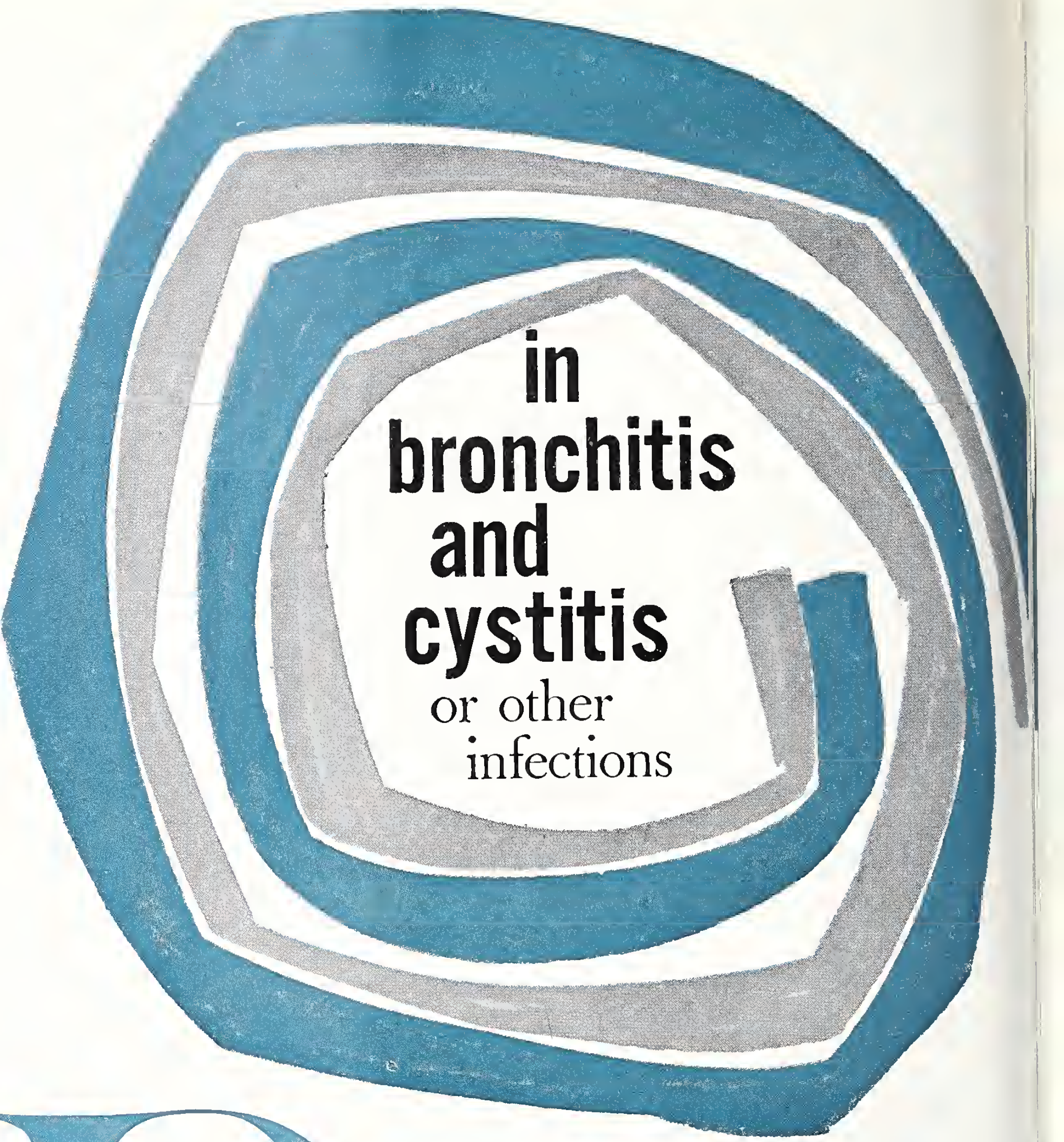
There seems to be an awakening of the Civil Defense effort in Missouri after a considerable period of lethargy. Let us hope that the effort will get off the ground.

One of the most vital signs, I believe, is Governor Dalton's appointment of a "Governor's Advisory Committee on Disaster Medical Care," on which those professions most vitally related to human welfare are represented.

In addition to this, a full time man is being added to the staff of the Division of Health to work on medical manpower mobilization and training, and a physician on a part time basis as a consultant in this field.

In view of mounting world tension, it behooves each of us in the medical profession to do all that we can to prepare ourselves to function efficiently in event of disaster and to teach those who aid us in the basic principals of medical care, to which they will ultimately be upgraded. We should also urge local and state officials to encourage, wherever and whenever possible, the establishment of sound survival practices. To this end, only, can we survive the horrors and panic of nuclear destruction that could be loosed upon us by a psychotic, maniacal aggressor, and without which our way of life could be completely elimnated—or set back a thousand years.

Carl D. Siegel, M.D.



antibiotic therapy wi

DECLO

CAPSULES, 150 mg., 75 mg. *Dosage:* Average infections—150 mg. four times daily. Severe infections—Initial dose of 300 mg., then 150 mg. every six hours.

PEDIATRIC DROPS, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. *Dosage:* 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into four doses.

SYRUP, 75 mg./5 cc. teaspoonful (cherry-flavored). *Dosage:* 3 to 6 mg. per pound body weight per day—divided into four doses.

PRECAUTIONS—As with other antibiotics, DECLOMYCIN occasionally give rise to glossitis, stomatitis, proctitis, nau diarrhea, vaginitis or dermatitis. A photodynamic reactio sunlight has been observed in a few patients on DECLOMY Although reversible by discontinuing therapy, patients sh avoid exposure to intense sunlight. If adverse reaction or i syncrasy occurs, discontinue medication.

Overgrowth of nonsusceptible organisms is a possibility DECLOMYCIN, as with other antibiotics, and demands that patient be kept under constant observation.

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DEMETHYLCHLORTETRACYCLINE LEDERLE

against relapse—up to 6 days' activity on 4 days' dosage

against secondary infection—sustained high activity levels

against "problem" pathogens—positive broad-spectrum antibiosis

Plan now to attend the A.M.A. Clinical Session in Denver, November 27-30

Ramblings of the Field Secretary

Have you ever been to Schell City, Mo.? Here's another small united community going out after something it wants with no thought of the too common tendency of today—"let the government do it." This town, under the leadership of its dynamic Mayor, Mr. Warren Haddix, and a handful of businessmen, spearheaded a project to construct a modern doctor's office as one factor in attracting an M.D. to locate there. They secured advice from Sears-Roebuck Foundation as how to best survey their area to show the need for a resident physician, and then to go about selling the people on raising the funds locally to build a new office which was needed for any doctor who might move in.

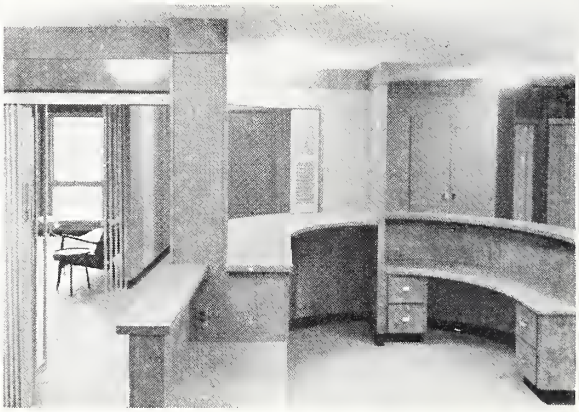
Schell City has built a new doctor's office building.

The survey indicated the need and potential support were there. Bolstered by these findings the local people raised the funds to build a new, attractive office, suitable for one or two doctors. They are now seeking the doctor who wants to practice in a small town, approximately 400 population with a wide trade area, where he will really be appreciated and supported.

Reception room is attractive.

Schell City is close to good hospitals—one at Eldorado Springs, 18 miles and one at Nevada, 25 miles. The Osage Wildlife Management area of the Missouri Conservation Commission is located in the Osage River bottoms immediately to the east of Schell City. This public hunting area, currently in the acquisition and development stage, will total about 7,000 acres.

The primary purpose of the area is to provide additional public waterfowl hunting facilities in the southwestern portion of the state, with 1,570 acres to be flooded annually for this purpose. Two permanent reservoirs will provide 816 acres of first class fishing water. Waterfowl hunting is expected to begin in the fall of 1963 and reservoir fishing that same spring. It is estimated that as soon as most public facilities are fully operational, and as soon as the public becomes acquainted with the area, about 9,500 hunters, 10,800 fishermen, and 2,000 picnickers will use the area annually.



Receptionist's station adjoins the reception room.

How can a doctor miss by locating here? He can sandwich into his constantly increasing practice, a run out to the hunting and fishing area everyday (in season, of course) and enjoy those thrills which come only to that growing clan of hunters and fishermen.

For a real picture of the opportunities for a doctor locating in Schell City it is suggested you contact Mayor Warren Haddix. A new, functionally constructed office is waiting along with a community which wants a doctor and has concretely demonstrated this want.

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when the others fail?

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For Weight Control
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CALORIES
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GRATIFYING RESULTS

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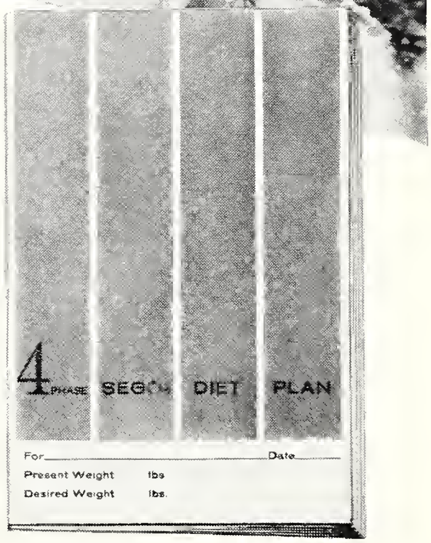
SUPERIOR FLAVOR
10% MORE PROTEIN
25% MORE VOLUME FOR INCREASED SATIETY

At each step of the 4-phase graduated diet program more foods are added, ending with a well-balanced normal diet.

Ask your Pet Milk representative for copies of the SEGO Diet Plan and your personal flavor samples—Banana, Orange, Chocolate and Vanilla. Or write Pet Milk Co., Dept. 115, St. Louis 1, Mo.

"SEGO"—Reg. U. S. Pat. Off. Copr., 1961, Pet Milk Co.


4 PHASE SEGO DIET PLAN
For
Date
Present Weight lbs
Desired Weight lbs.

News—Personal and Professional

At a dinner meeting of the St. Louis Pharmacists Association held on September 17, a "Distinguished Service to Pharmacy Award" was presented to **Luke A. Knese**, M.D., St. Louis. The plaque reads "Saint Louis Pharmacists Association in humble recognition for distinguished service in the interest and development of the profession of pharmacy, public health, and improvement of detailed and allied professional relations acclaims State Representative Luke A. Knese, M.D., as an honorary member, September 17, 1961."

Officers recently installed and elected by St. Joseph's Hospital, Kirkwood, are **John C. Martz**, M.D. president; **Quentin M. Gaines**, M.D., Kirkwood, president-elect; **Joseph G. Ernst**, M.D., Kirkwood, secretary-treasurer.

What the lay person can do to protect himself against cancer was discused by **Vincent P. Muenster**, M.D., St. Charles, at an annual dinner meeting of the St. Charles County Cancer Society.

The Missouri State Board of Registration for the Healing Arts has scheduled an examination to be given in St. Louis on November 17 and 18.

Among speakers at the meeting in New Orleans in September of the American Society of Plastic and Reconstructive Surgery was **Francis X. Paletta**, M.D., St. Louis.

Recently appointed chairman of the Service Committee of the St. Louis City and County Unit of the American Cancer Society is **Louis F. Howe**, M.D., St. Louis.

"Twins and Their Problems" was discussed by **Robert L. Korn**, M.D., Clayton, at a recent meeting of the Mothers and Twins Club in St. Louis.

"Clinical Abnormalities of Kidney Function" was the subject of a paper presented by **Ian M. Thompson**, M.D., Columbia, before the North Central Section of the American Urological Association which met in Cincinnati in late September.

The Medical History Group of the University of Missouri will have as speaker at its November 16 meeting, **James M. A. Weiss**, M.D., Columbia, who will speak on "Thoughts on Suicide—From Socrates to Stengel."

Recently elected officers of the staff of Deaconess Hospital, St. Louis, are **John J. Roth**, M.D., St. Louis, president; **William L. Macon**, M.D., Ladue, president-elect; **James Y. Griggs**, M.D., Des Peres, vice president, and **William G. Arney**, M.D., Creve Coeur, secretary-treasurer.

Among 1,103 surgeons inducted as Fellows by the American College of Surgeons at a meeting in Chicago in October were the following Missouri surgeons: Drs. **Carl H. Almond** and **John H. Landor**, Columbia; **Burleigh E. DeTar, Jr.**, Joplin; **John L. Barnard, Jr., Thomas M. Holder, Raymond A. McCanse, Paul T. McGannon, Earl G. Padfield, Jr.**, and **Leonard A. Wall**, Kansas City; **H. Graham Parker**, Platte City; **Arne E. Carlson**, St. John; **Matt H. Backer, Jr., Donald T. Behrens, M. Richard Carlin, Dominic V. Costa, Raymond O. Frederick, Robert E. Funsch, George T. Gafney, Meredith J. Payne, James Pennoyer, James J. Seeley, John S. Spratt, Jr.**, and **Vallee L. Willman**, St. Louis; **Max A. Heeb**, Sikeston; **Erin M. Dillard** and **Vernon W. Kolze**, Springfield.

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New Members

Rolfe A. Becker, M.D., 751 East 63rd St., Kansas City 10, has become a member of the Jackson County Medical Society. Dr. Becker is a native of Seattle, Washington, received his preliminary education at the University of Washington, and his M.D. degree at the University of Washington in 1957.

John M. Casebolt, M.D., 4000 Baltimore St., Kansas City, has become a member of the Jackson County Medical Society. Dr. Casebolt is a native of Missouri, received his preliminary education at Purdue University, and his M.D. degree at the University of Missouri in 1958.

Larry J. Dowell, M.D., Pattonsburg, has become a member of the Grand River County Medical Society. Dr. Dowell is a native of Missouri, received his preliminary education at the University of Missouri, and his M.D. degree at the University of Missouri in 1960.

Roger L. Green, M.D., Senath, has become a member of the Dunklin County Medical Society. Dr. Green is a native of Missouri, received his preliminary education at the University of Missouri, and his M.D. degree at the University of Missouri in 1960.

John W. Hardy, M.D., Professional Bldg., Kansas City 6, has become a member of the Jackson County Medical Society. Dr. Hardy is a native of North Dakota, received his preliminary education at the University of North Dakota, and his M.D. degree at the University of Kansas in 1958.

R. K. Hornstra, M.D., 2300 McCay St., Kansas City 8, has become a member of the Jackson County Medical Society. Dr. Hornstra is a native of The Netherlands, received his preliminary education at the University of Utrecht, and his M.D. degree at the University of Utrecht, Holland, in 1950.

Stanley D. Kern, M.D., Osceola, has become a member of the West Central County Medical Society. Dr. Kern is a native of North Dakota, received his preliminary education in Nevada, and his M.D. degree at the University of North Dakota in 1958.

Mansour J. Naime, M.D., 4526 Paseo Blvd., Kansas City, has become a member of the Jackson County Medical Society. Dr. Naime is a native of Lebanon, received his preliminary education at the University of Beirut, and his M.D. degree at the University of Beirut in 1953.

Robert E. Shank, M.D., 501 South Euclid Ave., St. Louis 10, has become a member of the St. Louis Medical Society. Dr. Shank is a native of Kentucky, received his preliminary education at Westminster College, and his M.D. degree at Washington University in 1939.

Oscar Schneider, M.D., 4050 Lindell Blvd., St. Louis 8, has become a member of the St. Louis Medical Society. Dr. Schneider is a native of California, received his preliminary education at the University of Oregon and Reed College, and his M.D. degree at University of Oregon in 1931.

Donald E. Sklenar, M.D., St. Joseph, has become a member of the Jackson County Medical Society. Dr. Sklenar is a native of Kansas, received his preliminary education at the N. W. State College, and M.D. degree at University of Missouri in 1959.

Dieter Wurr, M.D., 1300 Grant Road, St. Louis 19, has become a member of the St. Louis Medical Society. Dr. Wurr is a native of Germany, received his preliminary education at Gymnasium Niesky, and his M.D. degree at the University of Goettingen in 1949.

Paul P. Young, M.D., 9406 E. 63rd St., Raytown, has become a member of the Jackson County Medical Society. Dr. Young is a native of Nebraska, received his preliminary education at the University of Nebraska, and his M.D. at the University of Nebraska in 1958.

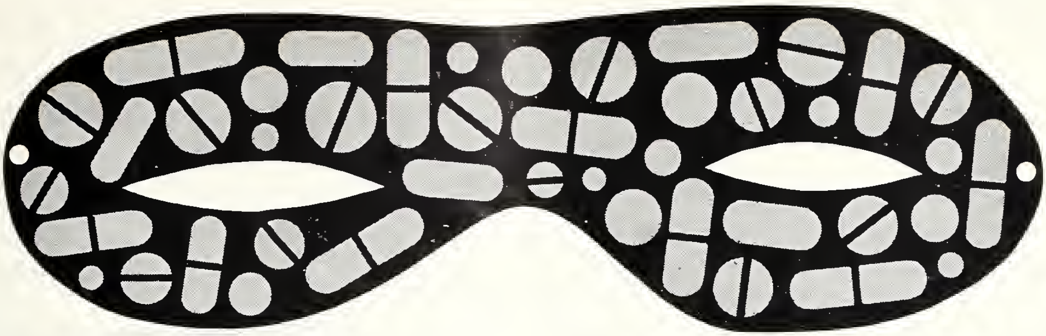
FRACTURES TO BE DISCUSSED

The St. Louis Surgical Society will present a panel discussion on "Fractures and Their Complications" on November 7, at 5:30 p.m. at the St. Louis Medical Society Auditorium.

Guest Moderator will be Preston A. Wade, M.D., New York, professor of clinical surgery at Cornell University Medical College and chief of Combined Fracture Service at the New York Hospital and Hospital for Special Surgery.

Participants in the panel will be Robert E. Funsch, M.D.; Jerome J. Gilden, M.D.; George E. Scheer, M.D., and Arthur H. Stein, Jr., M.D., all of St. Louis.

All members of the profession are invited to attend.



drugs anonymous

One of the several hastily conceived and potentially dangerous suggestions for reducing drug costs is generic-name prescribing. The proponents of generic-name prescribing claim that it will lower drug costs significantly and—through supervision by the Federal Government—provide quality equivalent to that of trademarked drugs. We maintain that these claims are false. Here are some authoritative answers to the principal questions posed by generic-name prescribing.

How much money would be saved if all prescriptions were written for generic-name drugs?

"The [Rhode Island] Division of Public Assistance examined 10,000 drug prescriptions for welfare recipients for the purpose of determining the actual savings . . . of generic versus trade-name drugs. The drugs had cost $28,000. Substituting generic drugs whenever possible would have provided a saving of less than 5 per cent. Syracuse has made a similar study of drug costs with comparable results."

Rhode Island Medical Journal,
January, 1961

Are the savings worth the risk of sacrificing quality?

". . . it is unsafe [to prescribe generically] because there is not sufficient policing of our standards. . . ."

Lloyd C. Miller, Ph. D.
Director of Revision of the U.S.P.

"The naive belief that, if a product was not good, the FDA would prohibit its sale is just not realistic. . . . it is completely impossible for the FDA to check every batch of every product of every manufacturer. . . . Hence the integrity and reputation of the manufacturer assume unusual significance where drugs and health products are concerned."

Albert H. Holland, M.D.
formerly Medical Director of the
Food and Drug Administration

Smith Kline & French Laboratories, Philadelphia SK&F

County Society News

FIRST DISTRICT

JOSEPH L. FISHER, ST. JOSEPH, COUNCILOR

Buchanan County Medical Society

The first fall meeting of the Buchanan County Medical Society was held on September 6 in the Empire Room of Hotel Robidoux. Seventy doctors from St. Joseph and Northwest Missouri attended the dinner and meeting. Judson M. Hughes, President, presided. Pfizer Laboratories was host for the dinner and program.

Following dinner and a business session, a film was shown on setting up a community program for mass polio immunization using Sabin vaccine.

Membership applications of Dr. Donald Sklenar for transfer and Dr. Paul Hayes for provisional were accepted.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The September meeting of the Grand River Medical Society was held in the Coffee Shop of the Strand Hotel in Chillicothe on September 14. Present, in addition to members and their wives, were Dr. William G. Lockhart, St. Joseph; Mrs. Don Walsworth, Marceline, and representatives of Lederle and Geigy Pharmaceuticals Companies.

Dr. Lockhart, neurosurgeon, spoke on "The Diagnosis and Treatment of Carotid Arterial Thrombosis." He illustrated the use of carotid arteriography with x-rays and urged awareness of this possibility in patients with the "stroke syndrome." Surgical treatment was discussed.

The Auxiliary combined a report on Civil Defense and bomb shelters with instruction by Mrs. Don Walsworth on how to make hats. Careful planning and a willingness to accept criticism are essential for both undertakings.

At the business meeting, Dr. J. Larry Dowell, Pattonsburg, was accepted for membership in the Society.

An expression of sympathy was sent to Mrs. John H. Lucas of Brookfield. Her husband, Dr. John Lucas, who passed away during the summer, was an active member of the State Medical Association from 1916 to 1959 and for the past two years has been an honorary member of the state and local societies.

The president reported on some correspondence, none of which required action by the group, and the meeting was adjourned.

Frank R. Daley, M.D., *Secretary*

SECOND DISTRICT

A. P. ROWLETTE, MOBERLY, COUNCILOR

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society functioned as host to the high school football coaches of its area at a dinner meeting Tuesday evening, September 19, at the Moose Lodge in Hannibal. The program for the evening was centered around athletic injuries.

Dr. John W. Payne, orthopedic surgeon, Columbia, talked on knee injuries, and James Baker, M.D., Missouri University team physician, discussed shoulder and soft tissue injuries.

Considerable open discussion followed the formal presentations. This served as a practical program for this time of year and the comments from the coaches following the meeting were most complimentary. Both speakers from Columbia presented informative talks made most interesting and effective through the use of slides.

Wyeth Hamlin, M.D., *Secretary*

FOURTH DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A joint dinner meeting of the Lincoln-St. Charles County Medical Society and the dental societies of the area was held on Tuesday night, September 26, at the Golf View Inn, just south of St. Charles.

The evening festivities began with a social hour sponsored by the doctors of the Benrust Surgical Building of St. Charles, with dinner and the program following at the Golf View Inn.

The guest speaker for the evening was James Jolly, D.D.S., of St. Charles. This proved to be both an interesting and profitable meeting.

V. P. Muenster, M.D., *Secretary*

SIXTH DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The regular meeting of the West Central Missouri Medical Society was held Thursday evening at the Nevada Country Club, September 14. The program of the evening was preceded by the usual social hour for all of the members and their guests, who consisted of some forty coaches from the various high schools of the area present for the second annual high school football injury symposium. Dean Vernon Wilson of the Missouri University Medical School was present, having flown Mr. Charles Rash of the football coaching staff who had a part on the program. After the social hour we enjoyed a very wonderful dinner served cafeteria style by the Nevada Country Club. Following the dinner, President Robert Magee called the meeting to order and proceeded with the symposium of the evening.

People responsible for the meeting were Dr. Magee, Mr. Rash, Dr. Pearse, Mr. Rimmer, Dr. Leitch, Dr. Wilson, Dr. Weiford and Dr. Kiene.

Coaches and physicians made up the audience.

Dr. Edward Weiford, neurosurgeon of Kansas City, spoke on head injuries and neck injuries commonly seen, and presented three interesting case histories to bring out his points. Dr. Richard Kiene, orthopedic surgeon of Kansas City, presented his subject, "Shoulder Injuries," and made a fine presentation with slide illustrations. Mr. Rash of the coaching staff of the Missouri University football team presented an excellent talk on the training and the conditioning of players which was well received. Following these discussions, questions came from the floor and added further fruit to the program.

Those present included some 40 coaches and their assistants from the various high schools of the area, some coming as far as Aurora, Neosho and Joplin, with some of the physicians from their towns accompanying them to this fine meeting. The West Central Missouri Medical Society had a good turn out from the membership. It was a well attended meeting with the physician-coach ratio of attendance being one for one. We were also pleased to have Dr. Cecil Leitch, President of the Missouri Academy of General Practice, with us.

Following the adjournment of this meeting the Society held a short business meeting. The application for membership of Dr. Stanley Karn, Osceola, was approved and he was voted membership. Three other applications of new doctors in the area were passed out to be completed and presented for membership at a later date. Drs. Wray and Pearse discussed some business matters of the Society relative to the coming meeting in Chillicothe of the State Council.

Approximately 85 attended the meeting.

The meeting adjourned with the next meeting to be in Harrisonville in October.

Carter W. Luter, M.D., *Secretary*

NINTH DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

The Mid-Missouri Medical Society held a special dinner meeting at the Edwin Long Hotel in Rolla, Thursday night, September 7, with the program devoted to "The Prevention and Management of Injuries in High School Football." Physicians from the Ninth Councilor District of the Missouri State Medical Association, along with the high school coaches of the area were invited to be present on this signal occasion. More than 50 people including doctors, coaches and wives, were present to hear talks and see demonstrations from four "dyed in the wool" MU Tiger Boosters on the "Prevention and Management of Injuries in High School Football."

Glenn McElroy, M.D., Columbia, orthopedic surgeon, acted in the capacity of leader for the quartet discussions. He spoke first and spent considerable time discussing knee injuries, showing slides of such injuries and explaining how in many cases permanent crippling was avoided by surgery.

James Baker, M.D., MU team physician, discussed primarily soft tissue injuries, describing individual cases of treatment to MU players and the results obtained.

Dr. Stricker, Councilor, welcomed the doctors, coaches and wives.

Mr. Fred Wappel, trainer for the MU teams, gave actual demonstrations of various tapings of ankles and knees which are used to prevent as well as support against injuries. Fred stated that he and his staff tape as many as 65 ankles a day. He indicated that tape alone is no small item of cost, but such expenditure prevents many possible injuries.

Harry Smith, freshman MU football coach, was the last of the "four horsemen" to speak and he served as an ideal anchor man. Coach Smith in answering questions from the audience, feels that it is all right for seventh and eighth graders to play football if they are properly trained and if the boys are played by "sizes." That is, small boys are played against each other and big boys are played against each other, but not big boys against little boys. Coach Smith also left the impression that the MU football team this year has great potential but that one never knows this early in the season. Following the formal talks by the four speakers, a general discussion and question and answer period continued on and on. A halt was finally called at 11:30 p.m. The amount of interest shown on the part of the audience in this particular program was good to see and it is hoped that more meetings of this nature may be held in our area.

Mr. Wappel, MU trainer, demonstrated shoulder support on Dr. Myers.

Speakers were, left to right, Mr. Wappel, Mr. Smith, Dr. Baker and Dr. McElroy.

Dr. E. E. Feind, President of the Society, called the meeting to order and then requested

After 10 weeks of therapy— a clear skin, a new personality, a new world of fun and laughter

pHisoHex, used as a daily, exclusive wash, enhances any treatment for acne. Because it contains 3 per cent hexachlorophene, it supplies *continuous* antibacterial action to help combat the infection factor. pHisoHex cleanses better than soap because it is 40 per cent more surface-active.

Used together, pHisoHex and new keratolytic pHisoAc Cream provide basic complementary topical therapy for patients with acne—to unplug follicles and to help prevent comedones, pustules and scarring.

New pHisoAc Cream dries, peels and helps degerm the skin; flesh-toned, it tends to hide acne lesions as they heal.

pHisoHex, in unbreakable squeeze bottles of 5 oz. and NEW plastic bottles of 1 pint; pHisoAc in 1½ oz. tubes.

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CLINICAL PHOTOGRAPHS

Acne vulgaris before treatment

For treatment at home, this patient washed her face daily with pHisoHex and kept pHisoAc on her face twenty-four hours a day.

Nine office treatments consisted of mechanical removal of blackheads and applications of carbon dioxide slush. No other medication was given.

After 10 weeks of therapy

For Acne–pHisoHex® and
antibacterial, nonalkaline, nonirritating, hypoallergenic detergent

pHisoAc® Cream
keratolytic

Dr. E. A. Stricker, Councilor of the District, to preside.

M. K. UNDERWOOD, M.D., *Secretary*

TENTH DISTRICT

W. D. ENGLISH, CARDWELL, COUNCILOR

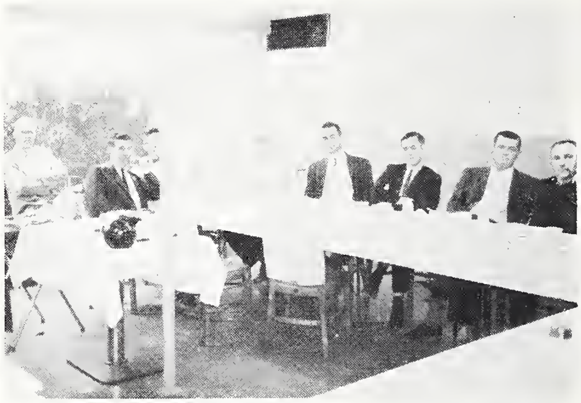
BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY

Vernon E. Wilson, M.D., Dean of Missouri University School of Medicine, was the featured speaker at a dinner meeting of the Butler-Wayne-Ripley County Medical Society at the Hickory House Restaurant, Poplar Bluff, Monday night, September 11. Some 25 physicians of the area were present to enjoy an interesting and informative discussion of the medical school by Dr. Wilson. The dean voiced appreciation to members of the Society for their assistance in various ways to the medical school. He stated that the new four year school now has a full staff of approximately 1,200 persons. The University Hospital was open to full capacity in January of 1961 and has been running approximately 80 per cent occupied. Patients stay at the hospital an average of 14 days and some 50,000 out-patients are now being handled at the Medical Center. He said that the school's research program is being stepped up and that excellent work in research is being done on the artificial heart and other chest programs and by the medical school's eye bank tissue program. He mentioned that the nuclear reactor being installed at the university will be used partly by the medical school and will be one of the largest, if not the largest, reactor in any of our state universities.

Dr. Wilson was the speaker.

The audience was attentive.

New x-ray and physiotherapy programs are being added at the school. Dr. Wilson stressed the need for better prepared college students and for private donations to set up additional medical student loans. He complimented the MSMA on its medical student loan fund as well as the loan fund at the University of Missouri. He pointed out that 88 medical students are enrolled in the first year class this fall along with 110 girls in the nursing school's freshman class. This, he said, brings the number of students in the medical school to 1,400 including some 600 who are doing part-time work. The medical school now has a faculty of 90 with 45 of these being added during the past year and a half.

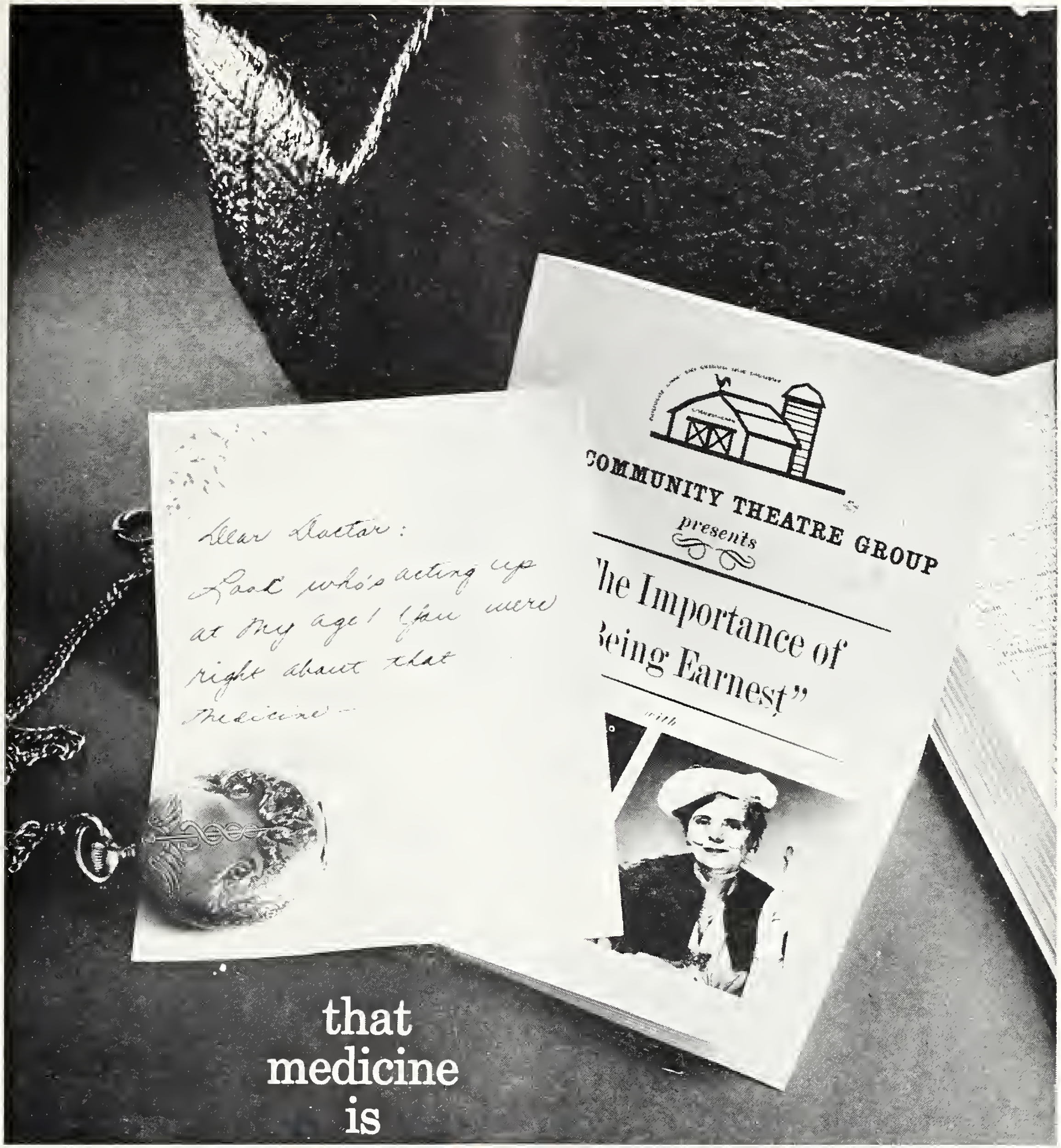


The program followed dinner.

Dr. Fred L. Kneibert, President of the Society, presided. Dr. Wilson was introduced by Dr. E. T. Hansbrough, Secretary.

New members who were voted to membership during the business part of the meeting were Drs. Dan B. Moore and James K. Mann of the Poplar Bluff Hospital Staff, and C. E. Ripley and Fred Caldwell of the Doctors Hospital staff.

Guests at the meeting in addition to Dr. Wil-



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son, were Ray McIntyre, Field Secretary of the State Medical Association, and Mr. Bob Stanard, News Editor of the *Poplar Bluff Daily American Republic.*

E. T. Hansbrough, M.D., *Secretary*

Dunklin County Medical Society

A dinner meeting of the Dunklin County Medical Society was held at the Cotton Boll Hotel in Kennett on Wednesday night, September 20. In addition to members of the Dunklin County Medical Society, doctors from surrounding county societies in the Bootheel were also invited to the meeting.

Drs. Spence, English and Morehead, officers, pose with Dr. Conrad, the speaker, second from left.

The evening festivities began with a social hour followed by the usual outstanding smorgasbord dinner served by the Cotton Boll Hotel.

Discussion continued after the meeting.

The scientific talk of the evening, sponsored by the Missouri Academy of General Practice, was given by A. H. Conrad, Jr., M.D., dermatologist of St. Louis. He based his discussion on "Pre-Cancerous Dermatoses." The general discussion period following Dr. Conrad's formal talk was an interesting and additive adjunct to the formal program. Dr. William Morehead of Kennett, President of the Society, presided.

Dr. E. L. Spence, Secretary, handled the arrangements and program for the meeting. Dr. W. D. English of Cardwell, Councilor of the Tenth District of the Missouri State Medical Association and a member of our Society, was also present along with some 20 other physicians.

E. L. Spence, M.D., *Secretary*

DEATHS

Anderson, Axel I., M.D., 723 W. 45th St., Kansas City, a graduate of University Medical College, Kansas City, 1909; member of Jackson County Medical Society; aged 81; died September 8, 1961.

Bell, Charles T., M.D., 635 W. 3rd St., Maryville, a graduate of Rush Medical College, 1909; member of Nodaway-Holt-Atchison-Gentry-Worth County Medical Society; aged 87; died August 27, 1961.

Grantham, Samuel A., Jr., M.D., 424 Byers Ave., Joplin, a graduate of Minnesota University, 1933; member of Jasper County Medical Society; aged 54; died September 13, 1961.

Owens, Michael J., M.D., 701 E. 45th St., Kansas City, a graduate of University Medical College, Kansas City, 1904; member of Jackson County Medical Society; aged 81; died September 9, 1961.

Sexauer, Arthur E., M.D., 375 Seraphin St., Ste. Genevieve, a graduate of St. Louis University, 1927; member of Mineral Area County Medical Society; aged 59; died September 1, 1961.

Shrader, E. Lee, M.D., 6650 Waterman Ave., St. Louis, a graduate of Washington University, 1922; member of the St. Louis Medical Society; aged 63; died September 1, 1961.

Wilhelmi, Otto J., M.D., 454 Sherwood Drive, St. Louis, a graduate of St. Louis University, 1917; member of the St. Louis Medical Society; aged 70; died September 12, 1961.

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The Council

The Council met at the Strand Hotel, Chillicothe, September 16-17, 1961, with Kenneth C. Hollweg, M.D., Kansas City, Chairman, presiding. Those present were Drs. Hollweg; J. H. Summers, Lebanon; Donald M. Dowell, Chillicothe; John I. Matthews, Jefferson City; Joseph L. Fisher, St. Joseph; Avery P. Rowlette, Moberly; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Paul R. Whitener, St. Louis; Doyle C. McCraw, Bolivar; A. E. Stricker, St. James; J. Loren Washburn, Versailles; H. M. Hardwicke, Jefferson City; Eugene Schwartz, Springfield; Vernon E. Wilson, Columbia; Messrs. James W. Foristel, Washington, D. C.; Frank Wooley, Chicago; John Buckner, Springfield; Edgar Mothershead, Hollister Smith, Lemoine Skinner, Gene Lunn, Jordan Singleton, Ray McIntyre, Tom P. Fox, T. R. O'Brien, St. Louis; Helen Penn, St. Louis.

TREASURER'S REPORT

In the absence of the Treasurer, Mr. O'Brien presented a report of income and expenses for the year to date, the current cash balance and a letter from the Mercantile Trust Company recommending that investments remain the same at this time. On motion of Dr. Dowell, duly seconded, the report was accepted.

PUBLIC SERVICE

The following report, including the Triple-Point Program, was presented:

Triple Point Program: Dr. Muether called attention to the "triple-point" program which had been presented to the Council and which appeared in the Council minutes. He also called attention to the House Concurrent Resolution No. 24 which sets forth a study by a legislative committee for needs of the aged in Missouri, to be conducted between sessions, as follows:

House Concurrent Resolution No. 24: WHEREAS, One of the major problems for the senior citizens of our nation is obtaining necessary and proper medical assistance; and

WHEREAS, This problem is especially acute in Missouri because of the unusually high percentage of elderly people residing in our state; and

WHEREAS, The General Assembly has been unable to arrive at acceptable solutions for this problem because of the lack of sufficient information and because the pressure of legislative activity leaves little time for a detailed study of situations and conditions relative to the problem; and

WHEREAS, The members of the House Committee on Public Health and Welfare recommended the establishment of an interim committee to make a complete investigation in this area; now, therefore, be it

Resolved, By the House of Representatives, the Senate concurring therein, that a joint committee of the general assembly be created to be composed of five members of the House to be appointed by the Speaker of the House, and five members of the Senate to be appointed by the President Pro Tem, to make a complete and thorough study of the problem of providing medical assistance to the senior citizens of Missouri; and be it further

Resolved, That the committee and its members are authorized to hold meetings and perform their duties during the interim between the adjournment of the 71st General Assembly and the convening of the 72nd General Assembly; and be it further

Resolved, That the committee prepare and submit a report to the 72nd General Assembly by the end of the second legislative week of the regular session thereof, together with the proposals it deems appropriate; and be it further

Resolved, That the Committee on Legislative Research be requested to provide professional, clerical or other services as the committee may require in the performance of its duties; and be it further

Resolved, That the actual and necessary expenses of the committee shall be paid from the joint contingent fund.

A review and proposed activity of the triple-point public service program was presented.

Discussion: In discussion, the vendor program was reviewed; the Marion County bulletin and its possible adoption by other societies was proposed; the possibility of a meeting of public relations personnel of component societies; the advisability of each component society having at least one public service project; the need for intensified action until the close of Congress, followed by component society activities; the possibility that the vendor law should be the basis for possible development of Kerr-Mills act; the impossibility of knowing the number of "near needy" in any community.

Action: It was decided that the Committee on Medical Economics be asked to work out figures on the needs in the state to present to the legislative committee.

Hospitals: Mr. Fox reported on a meeting of hospital personnel and said that the hospitals had taken a stand against health care under Social Security. He said that the Missouri Nurses Association had taken a similar stand, which is opposed to the stand that was taken nationally by that group. He said that the Missouri Hospital Association would like a joint committee with the Association to discuss mutual matters.

Advertisement: Dr. Stuart presented copies of the *Boonville Daily News* in which the physicians of Boonville had placed an advertisement stating the position of physicians concerning the King-Anderson bill. The paper had carried an editorial on the subject. Druggists in Boonville were also placing advertisements in the paper. He said that the one advertisement had been placed at a cost of approximately $5.60 per physician.

Future Programming Suggestions: Kerr-Mills: 1. In view of the legislature's reaction to the cost estimates of immediate full Kerr-Mills implementation, the possibility that the Association define more closely the details of the Kerr-Mills program needed in Missouri is suggested. If it is decided that proposals for implementation will have to be on a limited initial basis, as a foundation on which to build, concrete suggestions as to the kind and amount of benefits, along with terms of eligibility, are probably needed.

2. A study of the aging population of outstate Missouri by the Department of Rural Sociology, University of Missouri—the number, economic status, medical care

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needs, and especially the trends in these things—has been suggested to help establish the facts in this field, and perhaps the trend toward lessening of the problems.

3. As fully as possible, the Association should cooperate with the legislature's joint interim study committee.

4. Through all media, the Association should continue its efforts to gain understanding and support for the Kerr-Mills program by special groups and the general public. Major in this effort will be work by and through local medical societies on a regular program basis, utilizing the same kind of organizational activities necessary for King-Anderson opposition.

King-Anderson: 1. Bulletin to all local societies in very near future outlining organization along lines suggested by Illinois State Medical Society and re-emphasizing A.M.A. organizational suggestions contained in "Action Kit." This will be an effort to obtain more formal and effective organization in each society.

2. For background, bulletin to members adapting Dr. Howard's talk at A.M.A. Legislative Conference in March, "The Issues in Social Security Medical Legislation."

3. An attractive pamphlet reprint of *A.M.A. News* editorial explaining the virtues of opposing the wrong—to be sent all members with suggestion they distribute through their offices.

4. Bulletin to membership reprinting Representative Curtis' letter to inquirers about Social Security medical legislation, and other material.

5. Continuing efforts on state and local level to organize opposition to King-Anderson proposals, inform general public through all possible means of the dangers, provide extensive background at every opportunity, and to stimulate extra letter writing to Congress at appropriate times.

Local Action Programs (Special Projects): 1. Bulletin to societies reemphasizing plan of special local action projects, with view of having each society establish one such project in its program for fall.

2. Meetings of staff members with local societies or representatives of groups of societies to stimulate local action projects and to urge that they take advantage of public relations potential of regular society programs. A pilot meeting of this type is scheduled for mid-August with the Cole County Society.

3. Dr. Hardwicke has offered to give over sponsorship of various Division of Health programs, such as cancer control, tuberculosis control, nursing home and home care projects, to local medical societies. If approved, this plan would enable local societies to obtain public credit for various health programs in large part organized and financed by the state.

4. Continuing work to stimulate and assist local societies to investigate areas of greatest need, establish projects, work cooperatively with other community groups to solve problems and obtain suitable public recognition of their efforts.

Regular Programs: 1. Bulletin to local societies describing Marion-Ralls-Shelby activities, discussing communications with members, local programs and publicity opportunities.

2. A Welcome Wagon folder has been prepared for the Boone County Society, which, when printed, can be distributed to other societies as a suggestion for their similar use.

3. A new edition of the County Society Public Relations Manual is being published by the A.M.A., and will be distributed to all Missouri societies.

4. The St. Louis Medical Society, in conjunction with the Matthews Medical Books Company, has recently developed a books scholarship program for Washington and St. Louis University medical students which will provide free books for selected students for the four-year period. Investigation will be made to see if this program can be extended to the University of Missouri.

5. Continuing efforts will be made to stimulate establishment of regular local society programs in the public interest and to obtain suitable publicity for them.

General: 1. Solicitation of funds for the Student Loan Foundation, with series of publicity releases on tax status, results of solicitation, major gifts, loans, etc., when tax-deductible status is established.

2. Continuing publicity on regular association programs, such as AMEF campaign in October, preceptorship programs, physician placement activities, etc.

In discussion it was brought out that the Missouri Hospital Association opposed the King-Anderson bill but did not send in statements. It was announced that a bulletin rounding up the testimony on the King-Anderson will go to the membership within a short time.

It was announced that there will be six hearings on aging problems conducted by the U. S. Senate Committee on Aging in Missouri, the tentative schedule being Kansas City, December 6; St. Louis, December 8; St. Joseph, December 11; Springfield, December 12; Hannibal December 13; and Cape Girardeau, December 15. This was discussed and it was decided, on vote after motion of Dr. Dowell, duly seconded, that representatives of the county societies involved should request permission to present the viewpoint of medicine. It was suggested that information be secured from the A.M.A. on similar meetings held prior to the meetings in Missouri. It was pointed out that while Senator Edward V. Long of Missouri, a member of the Senate Special Committee on Aging subcommittee on Retirement Income, would chairman the meetings, it was definitely felt that discussion would not be restricted to retirement income.

A.M.A.

Mr. Woolley spoke briefly on the work of the A.M.A. and said that the A.M.A. was pleased with the progress in Missouri. He reported that Christian Church International Assembly is to be held in Kansas City the latter part of September which will be attended by 10,000 to 12,000 and that a resolution is to be offered urging the Assembly favor the King-Anderson Bill. He said that much of the federal administration program had been accomplished this year and that next year the concentration would probably be on legislation such as the King-Anderson Bill. He pointed out that the Ways and Means Committee might change by the time of the next session and might not be as sympathetic to medicine as the present one had been. He stressed that there should be letters from each component society to their Congressmen.

REPORT OF COMMITTEE ON TRAUMA RE: (CRASH INJURY PROGRAM)

Mr. Fox explained the Cornell University Automotive Crash Injury Research Program and said that an attempt had been made previously to have the study include Missouri. At that time the Highway Department was not in position to contribute to the study, but that now it seemed that it may get underway. The study needs approval by the state medical association, the state hospital association, and the state division of health. All data is sent to Cornell University where it is studied and recommendations made. As an outline of the proposed study in Missouri, the following was presented:

"Because of the pressing need to evaluate the effectiveness of recent automotive safety design modifications in terms of reducing injury consequences, it is proposed that in the State of Missouri the study be confined to accidents involving recent year model cars (to be specified during such sampling period, for example, '58, '59, '60, '61) in which injuries occur.

"The Missouri State Highway Patrol Summary Report of 1960 Accidents has been used as a guide to arrive at the estimated volume of cases. The sampling plan is designed to yield case reports on applicable passenger cars in approximately 650 accidents annually, which represents about one in twelve of all injury-producing accidents investigated by the Highway Patrol.

"To obtain an adequate volume of representative cases without imposing too great a loan upon any single group a study plan is proposed which calls for the rotation of sampling areas over a two year period.

"This study is concerned with selected passenger cars only; no trucks, buses, motorcycles, pedestrians, etc., are included."

On motion of Dr. Stuart, the report was approved.

AMEF

A brief report on the American Medical Education Foundation was presented, stating that each year the number of contributions and the number of contributors was increasing, but the needs of the medical schools was increasing at even a greater pace. It was stated that a letter will be sent to all members within a short time and also that material on AMEF will appear in the October Missouri Medicine.

A.M.A. SESSION

Dr. Washburn reported on the June session of the A.M.A., calling attention to the report in the August issue of Missouri Medicine, and stressed the resolution concerning osteopathy, resolutions on communications, the resolution on efficacy of drugs, polio vaccine, and called attention to the raise in A.M.A. dues, $10 to the beginning of 1962 and an additional $10 the beginning of 1963. Dr. Summers congratulated the delegates on their diligent attendance at sessions and their work at the meeting. A question was asked concerning action on disability insurance and it was answered that this was referred to the Board of Trustees of the A.M.A. for report at the next session of the House of Delegates.

A.M.A. WASHINGTON REPORT

Mr. James W. Foristel, of the A.M.A. Washington office, reported on legislation adopted and still pending in Congress.

MISSOURI LEGISLATIVE ACTIONS

Mr. O'Brien reported on the final outcome of legislation considered by the Missouri legislature since the last meeting of the Council. H. B. 133, the chiropractic bill, was vetoed by the Governor.

RESOLUTION 24

The House Concurrent Resolution No. 24, included in the report of the Committee on Public Service, was discussed. The members of the Interim Committee on Medical Care for the Aged are Senators William J. Cason, Clinton; Robert M. Coleman, Kansas City; Albert M. Spradling, Cape Girardeau, and Jack S. Curtis, Springfield; Representatives William R. Brazelton, Kansas City; James W. Williams, St. Joseph; James C. Skaggs, Ellington; J. J. Wimp, Kirksville, and Oscar L. Marsh, Aurora. The committee will meet on October 3 to elect a chairman and outline its work.

MEDICARE

Mr. O'Brien explained the new contracts on Medicare which included the restriction that there should be no published fee schedule. Since the House of Delegates had ruled that there should be a published fee schedule, and the contracts end September 30, the action possible for the Council to make was discussed. It was agreed that efforts to clarify the situation should be made.

ACTION OF A.M.A. ON OSTEOPATHY

The resolution passed by the A.M.A. House of Delegates concerning osteopathy was discussed, with the possibility of the appointment of a committee to confer with the osteopathic association concerning the resolution. In discussion it was pointed out that the MSMA bases its code of ethics on that of the A.M.A. and that possibly no action was needed, either in approval of the A.M.A. action or the appointment of a committee. On motion of Dr. Barger, duly seconded, it was voted that MSMA accept the action of the A.M.A. House of Delegates, Dr. McCraw dissenting.

INFANT AND CHILD CARE

Dr. Schwartz presented the report of a meeting of the Committee on Infant and Child Care as follows:

Present: Drs. Schwartz; H. M. Hardwicke, Jefferson City; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; Guy N. Magness, St. Louis; James J. Pascoe, Nevada; S. F. Cockerell, Independence, members of the committee; Drs. Hardwicke; Donald M. Dowell, Chillicothe; John I. Matthews, Jefferson City; J. H. Summers, Lebanon; Cecil G. Leitch, Blue Springs; Roy W. Pearse, Jr., Nevada; John F. Pearl, St. Clair; C. W. Meinershagen, Jefferson City; Miss Ethel Amstaett, Kansas City, public school nurse; Miss Helen Pfaff, Division of Health, Jefferson City; Mr. Homer Bolen, Department of Education, Jefferson City; Mr. Fred L. Rector, Department of Education, Jefferson City; Mr. Ray McIntyre and Miss Helen Penn, St. Louis.

H. B. 334: Dr. Hardwicke reviewed the history of H. B. 334, it being sponsored and introduced by the Junior Chamber of Commerce, its review by our committee with recommended changes, the large attendance of opponents at hearings necessitating a second hearing. He explained that he had not asked funds for the carrying out of the bill because he felt it was principally concerned with the private physician. He said that Section 3 was an amendment to the original bill. He reported that he had conferred with the Department of Education and that he felt there would be no difficulty in that phase. Dr. Hardwicke said that antecedent power of school boards could upgrade a state law.

Legal Opinion: Dr. Magness said that the attorney for the University City Schools had said that in his opinion inclusion of the written excuse circumventing immunization made the bill impossible of executing.

After discussion by Mr. Bolin, Drs. Hardwicke, Pascoe, Pearse, Leitch and Cockerell, Dr. Cockerell moved that Dr. Hardwicke be asked to get an opinion from the Attorney General whether or not a school board can require immunization in view of Section 3. This was seconded and passed. It was suggested that this opinion go to all schools with the communication that the Department of Education plans for September 1. In the discussion it was brought out that a method of clearance between schools and doctors would be needed.

Suggested Regulations: Dr. Hardwicke presented "Preliminary Ideas and Regulations for Implementation of Compulsory Immunization Law, as follows:

I. General Considerations: No special funds were appropriated to carry out this legislation.

Unless special effort is made to promote immunization in infancy, this new legislation may move us backward rather than forward because of the tendency of parents to wait until their children enter school before having them immunized.

In the absence of sufficient state funds, it may be necessary for some schools to place emphasis on getting students admitted for the first time properly immunized. Children of all ages should certainly be protected against polio, but it is doubtful that the Division of Health will be in a position to purchase polio vaccine for those children not now vaccinated (mostly indigent).

Many school systems, especially the larger ones, have effective programs in operation which achieve near maximum immunization levels. If possible, our plans should allow for a smooth transition of such schools of conformance with the new law.

Because of the inability of the Division to directly provide immunization of medically indigent children and because of the considerable variation in local medical and public health facilities, a fixed state-wide plan would be unworkable, as well as costly. There must be sufficient flexibility in the state plan to meet varying local conditions.

In the absence of any penalty provision in H. B. 334, enforcement will apparently rest entirely upon education and an assumption that parents will have their children immunized because "it's the law." Reference to this aspect of the law should be limited to school superintendents.

This program should serve to stimulate parents to keep immunization records for their children.

II. Rules and Regulations Governing Immunization to Be Required of Children Attending Public, Private, Parochial, or Parish Schools (Under H. B. 334, 71st General Assembly).

This was discussed, and the present difficulties over vaccines was brought out. After discussion it was voted, on motion of Dr. Landau, that the schedule of ages for immunization should follow those set out by the Committee on Control of Communicable Disease by the American Academy of Pediatrics. Dr. Hardwicke said that this portion of the regulations would be rewritten to comply with this instruction as follows:

"II A. Minimum immunization required for children attending public, private, parochial, or parish schools shall be those set forth in the January, 1961, publication of the Committee of Infectious Diseases of the American Academy of Pediatrics as follows: (These may be given individually or in combination at the discretion of the physician.)"

Schedule for Active Immunization of Infants and Children

Age	*Preparation*
1½ to 2 months	D. P. T. Poliovaccine
3 months	D. P. T. Poliovaccine
4 months	D. P. T. Poliovaccine
6 to 12 months	Smallpox vaccine
12 months	D. P. T. Poliovaccine
2 years	Poliovaccine
4 years	D. P. T. Poliovaccine
6 years	Smallpox vaccine Poliovaccine
8 years	D. T. ("adult type") Poliovaccine
10 years	Poliovaccine
12 years	D. T. ("adult type") Poliovaccine
14 years	Poliovaccine
16 years	D. T. ("adult type") Poliovaccine

Regulations: Dr. Hardwicke continued with the regulations as follows: "B. Vaccine dosage: The volume of injected antigen (vaccine) per injection shall be in accordance with the directions of the manufacturer.

"C. Record of Immunization: The statement of a parent or guardian regarding types and dates of immunizations received by his child shall be deemed satisfactory evidence of such immunization for purposes of the school superintendent's records.

"A written statement of a licensed physician that he is in the process of immunizing a child shall be deemed satisfactory evidence that such a child is being immunized. Such a statement shall be required at monthly intervals until the required immunizations are completed.

"D. Definition of Superintendent: School superintendent shall mean the chief administrative officer of any public, private, parochial, or parish school system."

III. Possible and Alternative Methods of Securing Immunization of Those Unable to Pay.

The program in any particular county, city or community will obviously depend upon the attitude of the physicians, school authorities, and the people in general, upon the medical and public health facilities available, upon the funds available and methods of financing, upon the number of children needing free service, and perhaps upon the intensity with which the program is executed. A single part of any one of the following methods could be interchanged with the same part of another method, thus producing a multitude of possible procedures. Whatever method is followed, the school authorities and physicians, along with any other group involved, must reach agreement on the details of the procedure to be used.

1. If the physicians wish and if they are in agreement, patients may be referred by the school authorities to the physicians' offices with a note indicating that the child is eligible for free vaccination. In this case the school people would be determining ability to pay. This is now being done in regard to eligibility for free school lunches. The physicians may wish to make this deter-

mination but this might produce difficulties, especially for the physicians. Under this program, the Division of Health, through its local and district offices, would furnish vaccine for free immunization to the fullest extent possible.

2. After reasonable effort to induce parents to have their children immunized through their own resources, an immunization clinic could be established, preferably for an entire county or an entire large to moderate sized town, to which children would be referred for free or part pay service. Eligibility, again, would be determined by the school authorities. Vaccine for free immunization would be supplied by the Division—as far as possible.

3. Medically indigent patients could be referred to the local health department or nursing service, if any. In the absence of a health officer or physician directly associated with the local health office, referrals would have to come from a physician with a request that the nurse immunize a specific individual for specific diseases.

4. Immunization clinics could be conducted in schools with local physicians and nurses staffing such clinics.

5. Whenever possible, the school conducting an immunization clinic should send to the family physician, information about the date and type immunization received by each individual. This interchange of information will keep the family physician's records complete.

6. It is the responsibility of the school superintendent to contact the local physicians concerning any immunization program to implement provisions of this law.

In discussion, it was pointed out that the superintendent would probably have to be the spearhead in carrying out the bill, but that education to the schools, the public and physicians would be needed.

The following schedule was presented by Dr. Hardwicke:

IV. Schedule for further planning and implementation of H. B. 334.

A. On August 4, 1961, copies of law will go to all local health units with a brief explanation of preliminary plans.

B. Doctor Hardwicke will meet with the medical advisory group in Jefferson City on August 13 to work out plans to secure maximum immunization protection for children in conformity with H. B. 334.

C. The Department of Education will mail a summary of all new school laws to school superintendents about September 1, 1961.

D. When final plans and regulations are worked out, necessary information will be sent by the Division of Health to all school superintendents and public health personnel. Notification to physicians to be worked out—possibly through "Pointers."

E. On October 3 and 4, the Department of Education holds a meeting with area supervisors and time will be allotted the Division of Health to discuss this program. Area supervisors have frequent personal contact with superintendents and can thereby facilitate initiation of this program.

It was suggested that the Academy of Pediatrics schedule on immunizations go to all physicians. It was pointed out that schools would have to keep records on immunizations and it was suggested that families be encouraged to also keep such records.

Health Courses: Dr. Magness reported that the teaching of health had been discontinued in the St. Louis schools and that he felt that this should be taken up with the Department of Education and that it be made a required course. Mr. Bolin said that while the Department was in sympathy with the idea, that they were deluged with requests for subjects to be required. It was decided that the Committee as such should discuss this problem.

Following lunch, the Committee members present convened and discussed the teaching of health in schools. On motion of Dr. Magness, it was voted that the committee recommend to the Council for consideration and presentation to the House of Delegates a resolution recommending to the Department of Education encouraging them to make the teaching of health a required part of the school curriculum in accordance with the resolution passed by the A.M.A. House of Delegates in 1960.

Education on Bill: Dissemination of information on H. B. 334 was discussed and it was the general feeling that the burden was on the Division of Health. Dr. Schwartz was asked to report to the Council on this meeting and on the actions taken by the committee pertaining thereto.

On motion of Dr. Stricker, the report was accepted.

FIELD SECRETARY REPORT

AAGP Survey: Mr. McIntyre reported that at a meeting on Saturday of the American Academy of General Practice that a survey sponsored by the AAGP was reported, showing that 75 per cent of individuals contacted approved of their personal physician, but that less than half of this number approved of physicians in general. Mr. McIntyre pointed out that projects changed the attitude toward any group and used the Boy Scouts as an illustration. He reported one project by component medical societies that had been outstanding and that had received favorable comment was on "Athletic Injuries" to which coaches and interested persons were invited. He said such programs had been held in St. Louis, Rolla and Nevada recently.

Missouri State Medical Foundation: Mr. McIntyre reported that to date 62 students had received loans for medical education; five have received two loans for different years; 55 loans had gone to University of Missouri students, five to St. Louis University students, one to a Washington student and one to an Albert Einstein University student. He said that there were now seven loans pending, amounting to approximately $5,000, and that the fund now had $9,900, of the original $50,000. It was reported that attorneys were working toward a clearance with the Internal Revenue Department to have any donations made tax deductible. Dr. Wilson said that there would be a need for about $25,000 in loans during the year at the University of Missouri. Mr. Buckner said that the Greene County Medical Society had loaned $5,400 so far this year.

Preceptorship Program: Mr. McIntyre presented a list of physicians who have agreed to take preceptees this year. He said that 23 students had elected this program for this year.

Physicians Located: Mr. McIntyre reported that 26 physicians had located in nonmetropolitan areas since the first of the year, and of these 10 were graduates of the University of Missouri.

ANNUAL SESSION

Dr. Matthews reported that the Woman's Auxiliary of St. Louis and St. Louis County Medical Society wished to furnish entertainment for the Sunday evening of the session. He pointed out that the Association wished to continue having county society presidents and secretaries and new members as guests and having receptions in various hospitality rooms, but that entertainment following the dinner seemed acceptable to him. It was felt that the Association could not assist financially in furnishing such entertainment, however. Dr. Matthews moved that the Auxiliary be written that entertainment would be appreciated and that a committee be appointed to work with them on the planning. On second, the motion was passed.

The chairman appointed Drs. Whitener, Furlow and Matthews to serve on this committee.

MENTAL HEALTH

A report of a meeting of the Committee on Mental Health held July 9 was presented, and it was also reported that the Committee would meet again soon for further study and, on motion, duly seconded, action was deferred until the further report of the Committee.

CIVIL DEFENSE

Dr. Hardwicke discussed several aspects of public health and announced that Dr. Carl Siegel had been appointed a coordinator on civil defense in the Division of Health. Dr. Hardwicke reported that studies of fall-out had been made in Missouri and discussed the effects of fall-out in case of an atomic invasion. He discussed a conference on aging and the changed standing of physicians in their communities. He pointed out that Sweden had the most complete socialization of any country, including medicine, but also had the highest suicide rate of any country.

Since Dr. Siegel is Chairman of the MSMA Committee on Civil Defense, it was moved by Dr. Dowell, duly seconded, that either he or Dr. George Watkins attend the Civil Defense Conferences to be held in the near future, expenses to be paid by MSMA if not covered otherwise.

UNIVERSITY OF MISSOURI

Dr. Wilson said that he wished to thank members of the Association for assistance with the appropriation bill for the Medical School of the University in the recent legislature.

BUDGET COMMITTEE

The Chairman appointed the following Budget Committee: Drs. Doyle, Stuart, Summers, Barger, Dowell and Hollweg.

DR. AND MRS. DOWELL THANKED

On motion of Dr. Barger, duly seconded, a vote of thanks was given Dr. and Mrs. Dowell for their hospitality and entertainment during the meeting.

NEXT MEETING

It was decided that the next meeting of the Council would be held December 2 and 3 in St. Louis.

Kenneth C. Hollweg, M.D., *Chairman*

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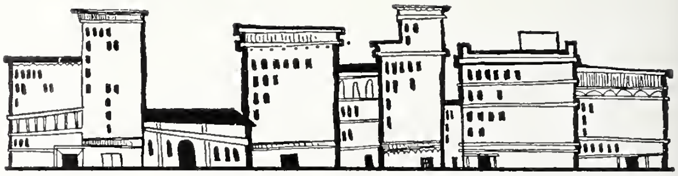

ST. LOUIS UNIVERSITY

Wohl Institute

David P. Wohl Memorial Mental Health Institute, 1221 S. Grand Blvd., is in the final stages of construction with completion of the 60 bed psychiatric hospital set for November. Exterior color tones of the new $1,340,000 Grand Avenue structure blend with Firmin Desloge Hospital which adjoins it immediately to the South.

An underground tunnel connecting with Desloge Hospital, the St. Louis University School of Medicine's main teaching hospital has been completed. It will provide the Institute with food service, supplies, steam and many laboratory facilities. It connects with an already existing tunnel leading to the School of Medicine and Cardinal Glennon Memorial Hospital for Children.

The David P. Wohl Memorial Mental Health Institute, newest addition to the St. Louis University medical campus, nears completion. View is to the South with Firmin Desloge Hospital of St. Louis University in the background.

Work on the interior of Wohl Institute is still in progress. The parking lot has been completed and landscaping of the hospital lawn and five open courtyards will begin soon. Mr. William Roberts is doing the landscape design for the St. Louis firm of Hellmuth, Obata and Kassabaum, architect for the project. The firm is assisting in the selection of furnishings for the hospital to complete the harmony of the overall architecture.

Construction of the Institute was made possible by a $500,000 contribution to the University by the late David P. Wohl, St. Louis philanthropist. His gift was matched by grants under the Hill Burton program and the Health Facilities Research Program of the U. S. Department of Health, Education and Welfare.

The Institute will increase the School of Medicine's program in psychiatric research and training. Facilities will be available for about 5,000 outpatient visits annually.

Trip Abroad

Dr. Louis L. Tureen, associate professor of clinical neurology and executive secretary of the section on neurology at the St. Louis University School of Medicine, spent the last week in August and the month of September abroad attending scientific meetings in London, Munich and Rome.

Dr. Tureen attended the Henry Head Centenary Celebration at London Hospital August 27 and International Congress of Neuropathology in Munich September 10. After a stop-off in Rome for an audience with the Pope, Dr. Tureen visited the Salpeter Neurological Hospital in Paris.

Dr. Tureen's research investigations at St. Louis University include studies in multiple sclerosis, muscular dystrophy and epilepsy. His research findings on "Behavior Disorders in Epileptic Children" was presented before the International Congress of Psychotherapy in Vienna Friday, August 25. Dr. Tureen was not present at that meeting. Dr. Tureen's wife and their daughter, Mary, accompanied him on his trip.

Meetings

Dr. C. Rollins Hanlon, director of the department of surgery, attended the Illinois Chapter meeting of the American College of Surgeons held in Peoria. Dr. Hanlon moderated a panel on "Trauma" during the morning and a panel on "Cholecystoptosis" during the afternoon.

Dr. D. E. O'Reilly, assistant professor of clinical orthopedic surgery, is serving as chairman of the local arrangements committee for the forthcoming meeting of the American Academy for Cerebral Palsy to be held at the Chase-Park-Plaza Hotel November 9-11.

Dr. R. Walter Schlesinger, director of the department of microbiology, was chairman of the morning session of a symposium on "The Biological Aspects of Viruses in Relation to Medical Problems" presented by Jewish Hospital of St. Louis, Washington University and St. Louis University Schools of Medicine Friday, October 13.

Dr. Francis X. Paletta, associate professor of clinical surgery, delivered a paper before the American Society of Plastic and Reconstructive Surgery which met in New Orleans September 24-29.

Dr. Edmund A. Smolik, associate professor of clinical surgery, was invited by the Czechoslovakian Medical Society to deliver the Purkinje Lecture before the International Surgical Congress Sept. 26-28. His paper was entitled "Cranial Cerebral Traumatic Lesions."

Dr. Grononwy Broun, professor of internal medicine, attended the 15th General Assembly of the World Medical Association held in Rio de Janeiro Sept. 12-20. He delivered scientific papers and appeared on a symposium on "Arbor Viruses."

The Medical Librarians of Greater St. Louis held their first meeting of the year in the Knights' Room of the Pius XII Library September 27. Francis O'Leary, Medical Librarian, is chairman for 1961-1962 and hosted the group.

WASHINGTON UNIVERSITY

Meetings

Thirteen surgeons from Washington University School of Medicine appeared on the program at the American College of Surgeons Clinical Congress held in Chicago in October. Dr. Carl A. Moyer, Bixby professor of surgery and head of the department, appeared on a panel on "Tumors of the Colon." Dr. Justin Cordonnier, professor of urology, took part in a panel discussing "Management of Genital Fistulas." Dr. Oscar P. Hampton, Jr., assistant professor of clinical orthopedic surgery, participated in a panel discussion on "Emergency Department Problems in Trauma." Dr. Fred C. Reynolds, professor of orthopedic surgery, spoke on "Nonosseous Injury to the Knee Joint." Dr. Theodore E. Walsh, professor of otolaryngology and head of the department, appeared on a panel discussing "Microsurgery of the Ear."

Dr. Joseph H. Ogura, professor of otolaryngology, appeared on a panel discussing a laryngectomy, while the operation was seen over closed circuit television from an University of Chicago hospital. Three surgeons were on hand to narrate film-lectures of surgical technics, developed at Washington University. Dr. James Barrett Brown, professor of clinical surgery, narrated "Skin Grafting—Practical Demonstration of Proven Technics." Dr. Eugene Bricker, associate professor of clinical surgery, narrated "Surgery for Advanced Cancer of Pelvis Viscera." Dr. Bricker also lectured in a postgraduate session on "Ileal Loops for Urinary Incontinence." Dr. Carl E. Lischer, assistant professor of clinical surgery, narrated a film concerning "The Single Thyroid Nodule." These motion pictures are made annually for the Congress upon invitation of the College of Surgeons. Research in many fields of interest to surgeons was presented during a forum on fundamental surgical problems.

Dr. Galen B. Cook, assistant in surgery, presented a report on "The Silicone Foam Diagnostic Enema." This research was done with Dr. Alexander R. Margulis, professor of radiology, who presented the findings at a meeting of the American Roentgen Ray Society in Miami Beach earlier this fall. Dr. Michel Ter-Poggossian, professor of radiology, and Dr. William McAlister, instructor in radiology, also attended the Florida meeting. During the surgical forum Dr. Wolff Kirsh, assistant in neurological surgery, reported on "Histochemistry and Quantitative Analysis of Alkaline Phosphatase During the Course of Experimental Intracranical Neoplasia." Dr. John S. Spratt, instructor in surgery and trainee, and Dr. Andrew Spencer, instructor in surgery, reported on "Radioactive Oxygen 15 in the Tracer Study of Oxygen Transport." This paper was prepared with Dr. Ter-Poggossian and Dr. Sanford Rudman, U. S. Public Health Service research fellow in radiology.

Two reports were made during the cardiology section meeting of the American Academy of Pediatrics, which also met in Chicago last month. Dr. Alexis F. Hartmann, Jr., assistant professor of pediatrics, spoke on "The Two Chambered Right Ventricle—Report on Eight Patients." Dr. Argyrios A. Tsifutis, research fellow in pediatrics, presented a paper on "Multiple Peripheral Pulmonary Stenosis—Report on Eleven Patients." Others attending the meeting from the department of pediatrics were Dr. M. Remsen Behrer, associate professor; Dr. David Goldring, professor; Dr. Antonio Hernandez, Missouri Heart Association research fellow; Dr. Donald Thurston and Dr. Jean Holowach Thurston, associate professors, and Dr. Hulda J. Wohltmann, assistant professor. Three associate professors of clinical surgery attended the American Society of Plastic and Reconstructive Surgery meeting in New Orleans earlier in the fall. They were Dr. Louis T. Byars, Dr. Minot P. Fryer and Dr. Frank McDowell.

Four faculty members at Washington University spoke at the annual convention of the Missouri Society for Crippled Children and Adults held in St. Louis in October. They were Dr. Eric Reiss, assistant professor of medicine and of preventive medicine and director of the Irene Walter Johnson Institute of Rehabilitation; Dr. Harry L. Acker, lecturer in physical medicine and rehabilitation; Mrs. Libby Bass, instructor in clinical medical psychology, and Dr. David Littauer, lecturer in hospital administration. Theme for the meeting was Community Planning for Rehabilitation.

Remodeling

A $175,000 remodeling project on the Eye Clinic has been completed and facilities are in use. Funds, which included $125,000 for construction and $50,000 for furnishing and equipment, were donated by patients of staff doctors. Clinic facilities in McMillan Hospital have been subdivided into ten doctors' offices and four waiting areas. Each office has equipment for a complete eye examination including instruments for testing vision, refraction and visual field, for measuring intraocular pressure and for viewing all parts of the eye under magnification. The remodeled facilities also provide special examining and treatment rooms for patients with retinal detachments or those requiring contact or special lenses for low vision. Tonography testing for glaucoma and photographic equipment are available.

Grants

Grants totaling $275,600 have been awarded to four faculty members at Washington University School of Medicine by the National Science Foundation, Dean Edward W. Dempsey has announced. Dr. Robert Crane, associate professor of biological chemistry, was awarded $105,000 for study of the "Mechanism of Intestinal Absorption." The grant will support an experimental study of the biochemical processes by means of which sugars in the diet are absorbed from the small intestine and pass into the blood stream. Dr. Crane will test a new hypothesis he has proposed concerning the source of energy required for the sugar absorbing process.

A $90,000 grant went to Dr. Jack L. Strominger, professor of pharmacology and microbiology, for research into the "Structure and Biosynthesis of Bacterial Cell Walls." Previous research has shown that some antibiotics interfere with bacterial growth by attacking the cell wall. The goal of this study is to understand the mechanism of action of these antibiotics through investigation of the cell wall.

Dr. Oliver H. Lowry, professor and head of the department of pharmacology, received a $61,600 grant for study of "Riboflavin Enzymes in Growth and Deficiency." He and his coinvestigator, Dr. Helen Burch, associate professor of pharmacology, will study the way the developing tissues change their enzyme content as their metabolic capacity grows. They will also use a riboflavin deficiency to alter tissue enzyme sequence and to observe the consequences on non-flavin enzymes and on metabolite levels.

Dr. Herman N. Eisen, professor and head of the department of microbiology, received a $19,000 grant which will provide funds to make possible informal meetings and conferences between small groups of American and European investigators to discuss new developments and ideas concerning the structure and formation of antibody molecules.

Dr. Marguerite A. Constant, associate professor of biochemistry in ophthalmology, has been awarded a $5,732 E. Matilda Ziegler Foundation for the Blind research grant, through the National Society for the Prevention of Blindness. She will study blindness caused by diabetes through study of the progression of blood vessel disease in guinea pigs, which have recently been found to develop lesions similar to those of human with diabetes.

A grant of $100,490 has been made to Barnes Hospital—Washington University Medical Center by the Hartford Foundation to apply electron microscopy technics for study of surgical specimens. The three-year grant will finance a study by the electron microscope of tissues removed at surgery, especially tumors. Dr. Lauren V. Ackerman, professor of pathology and surgical pathology, will direct the program. The grant raises the Hartford Foundation's total contribution to research and clinical programs at the medical center to $617,178.

Three research projects have been awarded a

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1. Clark, T. E., and Jochem, G. G.: Angiology **11**:361 (Aug.) 1960.

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total of $105,643 from the American Cancer Society. A grant of $48,389 was made to Dr. Joseph H. Ogura, professor of otolaryngology, to continue working on synthetic protheses for replacement of the larynx.

Dr. William J. Harrington, associate professor of medicine, was given a $17,254 grant to continue studies on basic biochemical lesions in leukemias and lymphomas.

An institution grant of $40,000 was made to provide ready funds for investigating leads which may arise during the year in pursuing regular research projects. The money is administered by a committee headed by Dr. Edward H. Reinhard, professor of medicine and consultant in hematology and oncology to the Mallinckrodt Institute of Radiology.

Student Award

One of the first two winners of the Matthews Medical Books Scholarship is James Marks, freshman student from Knoxville, Illinois. The scholarship, which is being given in connection with the St. Louis Medical Society's scholarship development program, will provide all required textbooks for the four year medical course.

Foreign Trips

Dr. William B. Kountz, assistant professor of clinical medicine, attended meetings of the World Medical Association in South America recently. He spoke in Rio de Janeiro during a week of scientific sessions on "Nutrition and Metabolism in the Older Person." He also visited the Central Army Hospital and the Hospital of the University of Buenos Aires and addressed the Society of Gerontology and Geriatrics of Argentina and participated in meetings in Santiago, Chile, Brasilia and São Paulo, Brazil, and Montevideo, Uruguay.

Dr. John E. Kirk, associate professor of medicine and director of research in the division of gerontology, was among 40 international scientists to attend a symposium in Hamburg, Germany. The scientists discussed recent developments concerning vascular and hematologic factors in arteriosclerosis. Reports were made on the problems of etiology and pathogenesis of the disease.

UNIVERSITY OF MISSOURI

Meetings

A seminar on pediatric urological problems will be held at the University of Missouri School of Medicine November 15, 1961. The seminar will be presented by the Urology Section of the Department of Surgery at the School of Medicine, and University's Continuing Education Service, in cooperation with the Missouri Academy of General Practice. It is being offered as an opportunity for Missouri medical practitioners to hear discussions of recent developments and experiences in the field or urology, as applied to the pediatrics age group.

Members of the guest faculty are Dr. Frank Bicknell, associate professor of urology, Wayne State University, Detroit, Mich., and director of urology at Harper and Children's hospitals, Detroit; Dr. James Headstream, professor of urology at the University of Arkansas, Little Rock; Dr. Willoughby E. Kittredge, professor of urology at Tulane University School of Medicine and director of the Department of Urology at Ochsner Clinic, New Orleans; and Dr. Henry Weyrauch, chairman of the Department of Urology at Presbyterian Medical Center, San Francisco.

University of Missouri School of Medicine participants will be Dr. Constantine Anast, associate professor of pediatrics; Dr. Clement E. Brooke, associate professor of pediatrics; Dr. James C. Cope, clinical associate professor of surgery (urology); Dr. Robert L. Jackson, professor of pediatrics and chairman of the department; Dr. Gilbert Ross, Jr., instructor in surgery (urology); Dr. Harry Stoeckle, associate professor of pediatrics; and Dr. Ian Thompson, professor of surgery (urology).

An Inter-Professional Seminar jointly sponsored by the University School of Medicine, the University School of Veterinary Medicine, and the Missouri Division of Health, was held at the UMMC September 18-19. The seminar provided an opportunity for physicians, microbiologists, public health nurses and engineers, sanitarians and veterinarians to study the various aspects of rabies, leptospirosis and histoplasmosis, the three diseases taken up at the seminar. All lectures were followed by open discussions.

School of Medicine participants were: Dr. Vernon E. Wilson, dean and director of the Medical Center; Frank B. Engley, Ph.D., professor and chairman of the department of microbiology; and Herbert S. Goldberg, Ph.D., associate professor of microbiology.

Grants

Dr. James M. A. Weiss, professor and chairman of the department of psychiatry, has been awarded a grant in the amount of $1,500 for continuation of research into the mental health problems of older persons. The grant was awarded by the State of Missouri Division of Health.

Trips and Talks

Dean Vernon E. Wilson, M.D., of the School of Medicine will be a participant in a panel discussion November 12 at a joint meeting of Central and South American deans and medical educators with representatives of various American medical and health groups, during the 72nd annual meeting of the Association of American Medical Colleges November 10-15 in Montreal, Quebec, Canada.

Meeting with the Latin American educators will be representatives of the Association of American Medical Colleges, the American Medical Association, the World Health Organization, foundations, and the U. S. Public Health Service. The subject of the panel discussion in which Dean Wilson will take part will be "Administrative Organization of Medical Schools in the United States."

Dr. James A. Green, associate professor of anatomy, consulted with Dr. Manel Maqueo in Mexico City, D.F., August 18-20, concerning a joint research project involving the human ovary.

Dr. Frank B. Engley, Jr., professor and chairman of the department of microbiology, visited the Universities of Maine and New Hampshire; the Marine Biology Laboratories at Salisbury Cove, Maine, and the Roscoe B. Jackson Memorial Laboratories at Bar Harbor, Maine, during the month of August. Also, as program and publications chairman for the Missouri Public Health Association, Dr. Engley attended an executive committee meeting in Jefferson City, on September 7.

Dr. Michael H. Ivey, assistant professor of microbiology, attended the American Society of Parasitology meeting held at Purdue University from August 27-29.

Dr. D. P. Durand, assistant professor of microbiology, attended a meeting of the Atomic Energy Commission at the University of Kansas, September 8, to hear papers concerned with radiation effect on viruses. The topic of discussion for the meeting was "Effects of Ionizing Irradiations on Immune Processes."

Drs. David G. Hall, assistant professor and acting chairman of the department of obstetrics-gynecology, Russell E. Hanlon, instructor, and Herbert J. Schmidt, assistant instructor, attended the district VII meeting of the American College of Obstetricians and Gynecologists in Kansas City, Mo., from September 14-16.

Larry D. Toalson, a third-year student in the School of Medicine, presented a paper, based on research at the University Medical Center into various types of anemia, before a joint meeting of the American Society of Clinical Pathologists and the College of American Pathologists Oct. 4 in Seattle, Washington. The paper is titled "Chromatogram Patterns of the Hemins in Various Types of Anemia." The research studies were conducted by Toalson in collaboration with Dr. Fred V. Lucas, professor of pathology and chairman of the department at the school; Dr. A. L. Middleton, assistant instructor and resident in pathology; and E. David Scott, a post-sophomore medical Fellow.

Dr. Clement E. Brooke, associate professor of pediatrics, was a visiting professor participating in grand rounds, patient conferences and special discussions on immunology, new virus diseases, genetics and neurology problems of children at St. Joseph's Hospital, Wichita, Kan., August 10.

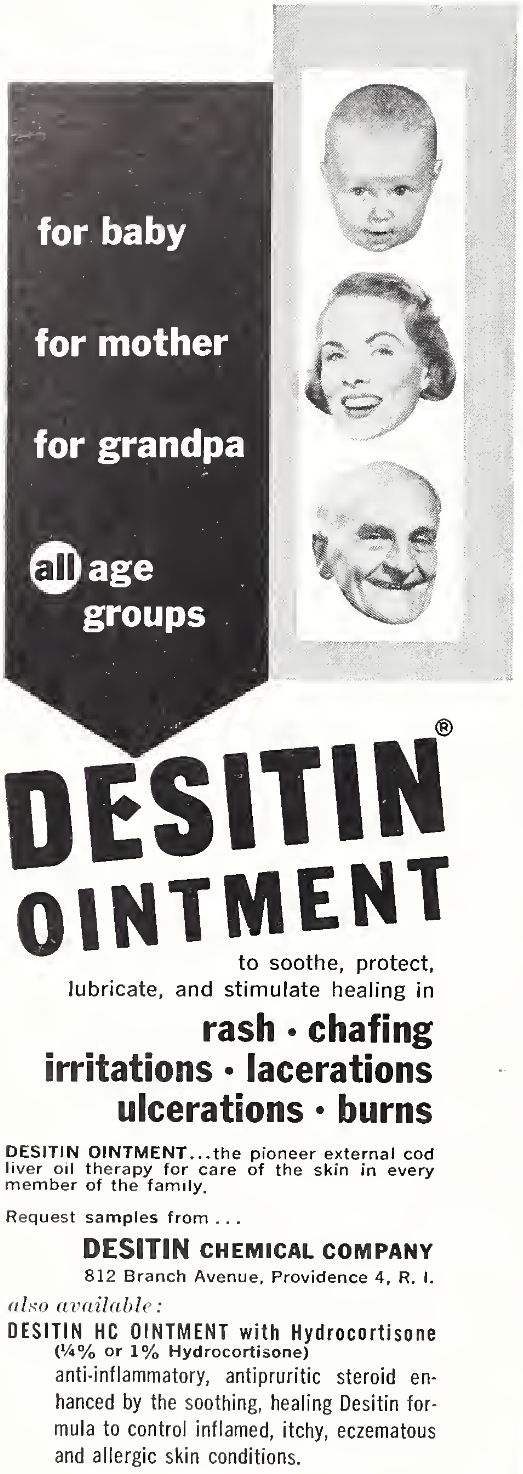
Dr. B. A. Westfall, professor and chairman of the department of physiology-pharmacology, attended the First International Pharmacological Congress, in Stockholm, Sweden, August 21-26. In the two weeks preceding the meetings, Dr. and Mrs. Westfall toured France, Switzerland, Germany, Austria, Italy, Sweden and England.

Dr. James E. Randall, associate professor of physiology and biophysics, presented a paper "Biophysics in the United States Medical Curriculum" at the International Biophysics Congress held in Stockholm, Sweden, July 31 through August 4.

Dr. Arthur W. Merrick, associate professor of physiology, is on sabbatical leave, at the University of Colorado, School of Medicine, Division of Electroencephalography, Colorado Psychiatric Hospital.

Dr. Jerry B. Critz, assistant instructor of physiology, presented a paper, "Serum Glutamic-Oxalacetic Transaminase Changes Following Exercise in Trained and Untrained Men" at the fall meetings of the American Physiological Society, at Bloomington, Indiana, September 5-8. Dr. Critz now holds the position of assistant professor of physiology, department of physiology and pharmacology, State University of South Dakota, School of Medicine, Vermillion, South Dakota.

Also attending the fall meetings of the Physiological Society were Dr. Dallas K. Meyer, pro-



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fessor of physiology, Mr. Ferrill A. Purdy, instructor in physiology, and Mr. Charles A. Robb, assistant instructor in physiology.

Drs. James M. A. Weiss, professor and chairman of the department of psychiatry, Henry V. Guhleman, Jr., clinical associate professor of psychiatry, and David Davis, associate professor of psychiatry, attended the 7th annual Institute for Professors of Psychiatry West of the Mississippi, sponsored by the National Institute of Mental Health, held at the University of California at Los Angeles, Sept. 7-9. They participated in panel discussions and seminars relevant to psychiatric education in medical schools, and focused on the topic: "Expectations of Medical Students From Their Undergraduate Psychiatric Instruction in Contrast to the Expectations of the Psychiatric Faculty."

Dr. Jose Sala, associate professor of radiology, is now en route to São Paulo, Brazil where he will attend the Inter-American meeting of Radiology. Dr. Sala is making various stops throughout South America where he is serving in the capacity of guest lecturer. He will return to his post in Columbia in October.

Dr. Gwilym Lodwick, professor and chairman of the department of radiology, has recently returned from Rochester, N. Y., where he and Mr. Roy Keller conferred with Dr. Lee Lusted in connection with obtaining approval of a research grant for the support of a new project entitled, "Computer Analysis of Tumor Roentgenograms." Dr. Lodwick also recently visited the National Institutes of Health and the Armed Forces Institute of Pathology in Washington, D. C.

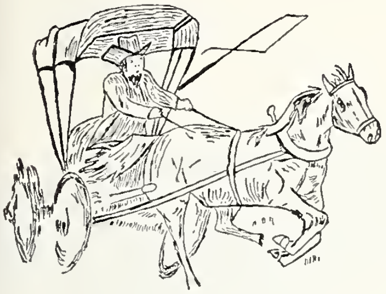
Dr. Lodwick left September 27 to attend the Michigan State Medical Society meeting in Grand Rapids, Mich. In conjunction with the meeting, Dr. Lodwick and Dr. Ernst Aegerter participated in a seminar on bone tumors for radiologists and pathologists. Dr. Lodwick will give an assembly talk entitled, "A Practical Approach to the Evaluation of Bone Tumors," and a section talk on "Computer Diagnosis in Radiology." One major aspect of the society meeting was an exhibit display. Dr. Lodwick's exhibit related to the destructive patterns of tumor growth in bone. Dr. Jay Armstrong, second-year resident in radiology, also attended the meeting and was in charge of the exhibit.

Dr. Paul C. Wheeler, assistant instructor, attended the meetings of the Roentgen Ray Society and the Society of Pediatric Radiologists in Miami Beach, Fla., late in September. Drs. Lod-

(Continued on page 1179)

LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

The management of St. John's Hospital at Joplin announce the purchase of 100 milligrams of radium. St. John's has recently installed both pathologic and x-ray laboratories and made extensive improvements in fireproofing the building.

St. John's Hospital, St. Louis, has purchased a tract of ground 150 x 160 feet, giving the hospital control of an entire city block. It is contemplated to erect a building costing approximately $500,000 as an addition to the hospital facilities. When the new building is completed, the total investment in buildings and grounds of the St. John's Hospital will be $2,000,000.

Teaching blind children the principles of hygiene and sanitation is an innovation recently begun at the Missouri School for the Blind, St. Louis.

Contracts have been let for the erection of the new building for the Missouri Pacific Hospital at St. Louis, and work was started in September. When fully completed and equipped the building will cost about $850,000.

The optometry law, passed by the last regular session of the General Assembly, does not affect physicians. Those physicians who have been examining eyes and fitting glasses, as well as dispensing the glasses, need not be exercised over the passage of the bill. On the other hand, optometrists are not permitted under the law to treat diseases of any kind by fitting glasses.

As a prophylaxis against blindness, the State Board of Health has adopted a recommendation offered by Dr. E. P. North, president of the board, that a 1 per cent solution of nitrate of silver be the standard solution approved by the board.

TWENTY-FIVE YEARS AGO

A death rate in St. Louis of 12.4 per 1000 population for the year ending March 31, 1936, was reported recently by Dr. Joseph F. Bredeck, Health Commissioner. St. Louis shares with Los Angeles in the third highest death rate in cities of 500,000 population and over. Nine major cities have accomplished more than these two in safeguarding health. Milwaukee in 1935 had a death rate of 8.4 per 1000 while St. Louis had a death rate of 12.4; in that year Milwaukee spent $1.36 per capita and St. Louis 53.4 cents per capita.

The Southwestern Branch Society of the American Urological Association convened for its sixteenth annual meeting in Omaha, Nebraska, September 17, 18 and 19. Missouri members who appeared on the program were Drs. Clinton K. Smith, Ernest G. Mark, R. Lee Hoffmann and Nelse F. Ockerblad, Kansas City; John R. Caulk, Otto J. Wilhelmi, Grayson Carroll and Bransford Lewis, St. Louis; H. McClure Young, Columbia, and Frank L. Bigsby, Kirksville.

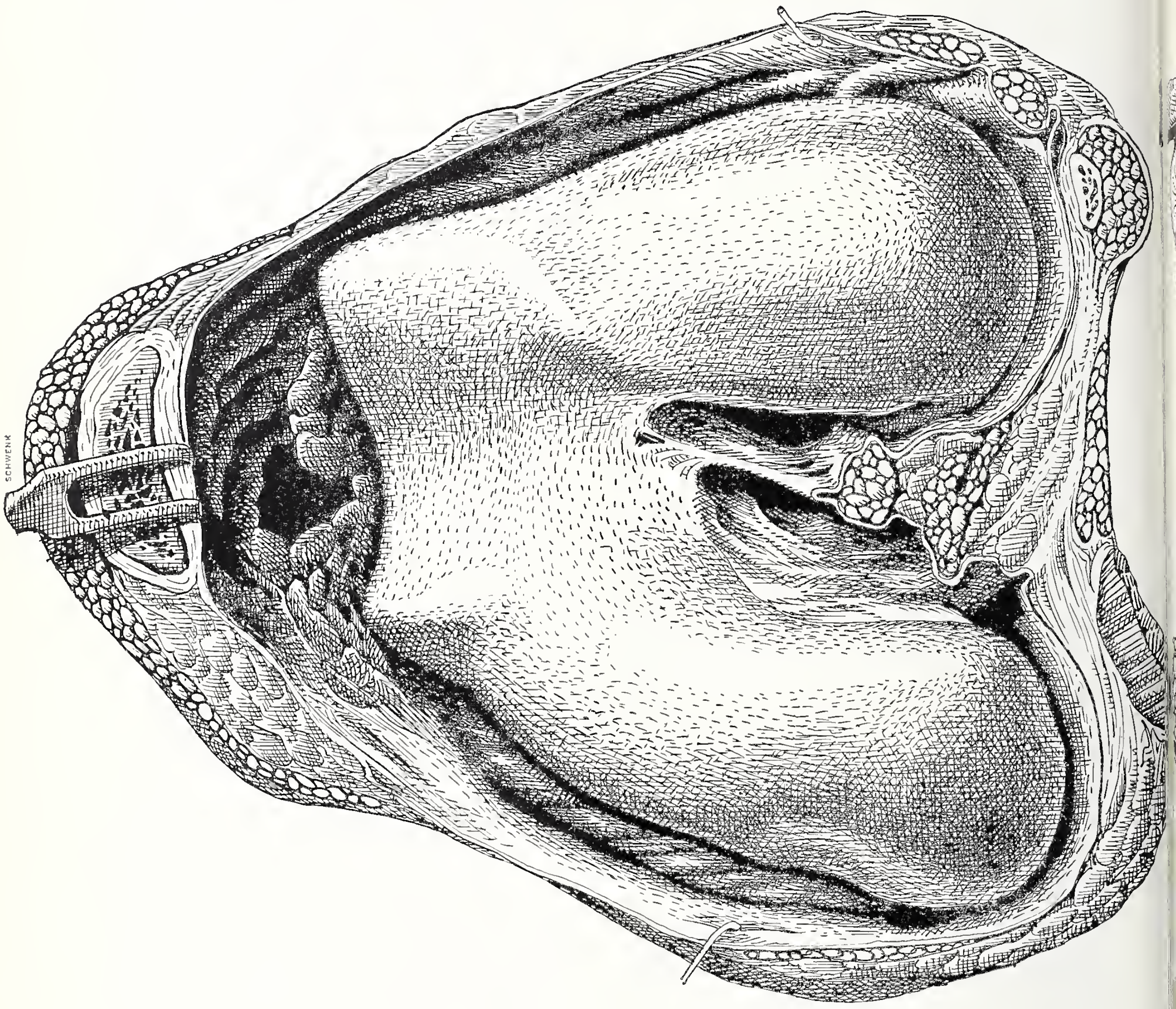
The Southeast Missouri Medical Association held its sixteenth annual meeting at Cape Girardeau October 14 and 15 at the Marquette Hotel. Dr. S. E. Mitchell, Malden, president-elect, delivered an address at the banquet. Officers presiding at the Cape Girardeau meeting were Drs. P. S. Tate, Farmington, president; Harry Barron, Fredericktown, vice president; Paul Baldwin, Kennett, treasurer; R. C. Kitchell, Sullivan, recording secretary, and John D. VanCleve, Malden, corresponding secretary.

The ever informative Logan Clendening seems to be a moving spirit in Kansas City in affording the general public first hand glimpses into modern American medicine. Recently "Disease and Destiny" (D. Appleton-Century Co., New York) by the globe-trotting Ralph Major, of that city, was reviewed. Now appears "The Gift of Columbus" (Brown-White Company) by Dr. Charles C. Dennie, also of Kansas City. The gift is really what Major would have called a plague, the plague of syphilis.

TEN YEARS AGO

J. W. Thompson, M.D., St. Louis, was elected vice president of the Southwestern Surgical Congress which met in St. Louis in September.

(Continued on page 1178)



because patients are more than arthritic joints... controlling inflammatory symptoms is frequently not enough!

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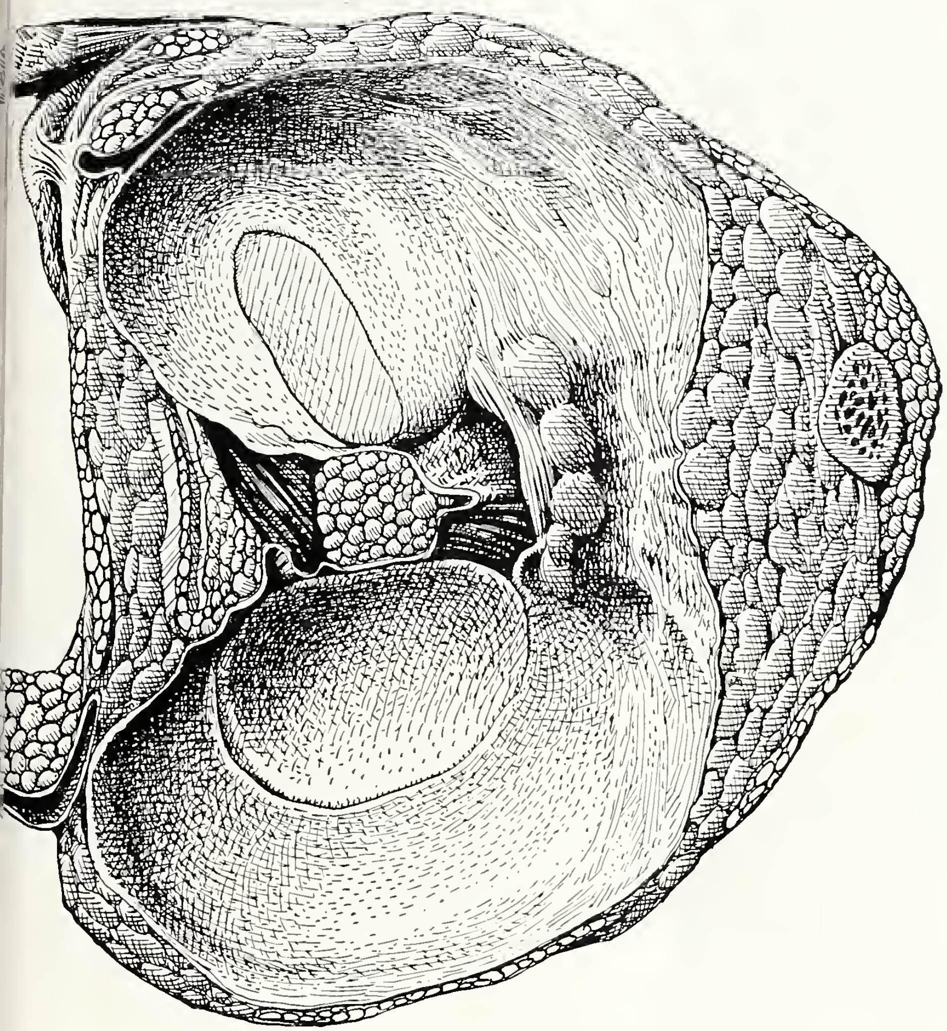

(Knee Joint, Left: distal end of femur; Right: proximal end of tibia)

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Plan now to attend the A.M.A. Clinical Session in Denver, November 27-30

MISSOURI MEDICINE IN REVIEW

(Continued from page 1175)

Grayson L. Carroll, M.D., St. Louis, received the 1951 Distinguished Service Award of the Mississippi Valley Medical Society at a meeting of the Society in Peoria on September 20.

The Boone County Medical Society at a recent meeting went on record as "regretting that force of circumstances made Dr. Trawick Stubbs feel that it was necessary for him to resign as Dean of the University of Missouri Medical School and regret the loss to the community of the services given by this energetic, loyal and honorable physician."

Paul Murphy, M.D., St. Louis, was recently appointed a member of the State Board of Nurses' Examiners.

The new Pemiscot County Memorial Hospital was dedicated with appropriate ceremony on Sunday afternoon, August 26. The building is three floors with a 62 bed capacity. The structure, equipment, grounds and incidentals represent an outlay of approximately a half million dollars.

The Bonne Terre Hospital at Bonne Terre has recently completed a $680,000 two and one half years' building and remodeling program. The present capacity of the hospital, including the new wing, is 77 adult beds.

The semiannual meeting of the St. Joseph Clinical Society will be held in St. Joseph on Thursday, November 8.

The Council met at Hotel Robidoux, St. Joseph, on September 22 and 23, with Victor B. Buhler, M.D., Kansas City, Chairman, presiding.

Mr. McIntyre reported that at a meeting on September 20, the Grand River Medical Society was formed, composed of Caldwell, Livingston, Grundy, Daviess, Mercer, Harrison and Linn Counties. The Council had formerly approved the hyphenation.

FROM THE MEDICAL SCHOOLS

(Continued from page 1172)

wick, Theodore Keats, professor, Kenneth Dolan, assistant instructor, Kenneth Rall, assistant instructor, and Cosmo Haun, assistant instructor, attended the meeting of the Radiological Society of North America in Chicago, Ill., in late September. Drs. Keats and Dolan each presented a paper and Dr. Lodwick was in charge of a refresher course.

Dr. John J. Modlin, professor and chairman of the department of surgery, was visiting professor of surgery at the Kansas City General Hospital on September 1 and 2. Dr. Modlin spoke to the House and Volunteer Staff on cancer of the skin, cancer of the head and neck and on the pelvic exenteration procedure. Dr. Modlin also attended the meeting of the Southwest Chapter of the American College of Surgeons, held in Joplin, Mo., September 13.

The section of urology in the department of surgery at the Medical Center presented three separate exhibits at the meeting of the South-Central Section of the American Urological Association Sept. 17-21 in Hot Springs, Ark. The subjects of the exhibits are "Cystinuria," "Urinary Incontinence, Cause and Cure," and "An Unusual Form of Ureteral Ectopia."

Dr. Ian M. Thompson, professor of urology and chief of the division at the University, presented a paper, titled "Clinical Abnormalities of Kidney Function," to the North Central Section of the American Urological Association at 9 a.m., September 28 in Cincinnati. He also conducted two symposia on Sept. 29 and 30 at the meeting on "Malignant Disease of the Kidneys and External Genitalia."

Dr. John H. Landor, assistant professor of surgery, attended a meeting of the Memorial Hospital Staff in Jefferson City, September 13, the topic of discussion being "Surgical Emergencies in the Newborn."

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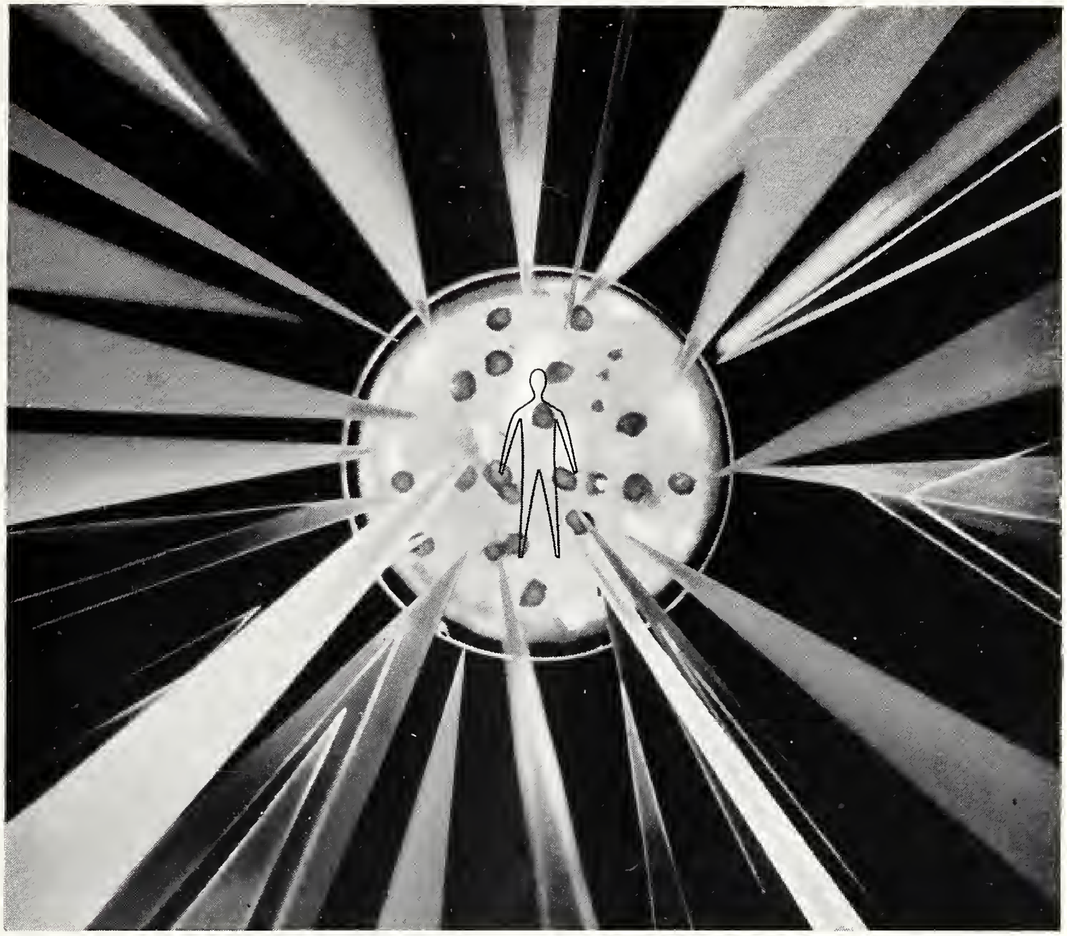

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Correspondence

RE: MEDICARE

Dear Mr. O'Brien:

The retention of certain servicemen beyond their normal date of expiration of active duty tours is essential in order that the augmentation of the Uniformed Services, called for by the President, can be attained. Implementation poses many problems. Among them is the valid identification of the extendees' dependents who will remain eligible for certain benefits while their sponsors remain on active duty.

The extension of tours of duty may result in some dependents being without a valid Identification Card for some time. The basis of identification of dependents is, as you know, the Uniformed Services Identification and Privilege Card (DD Form 1173). Each card carries an expiration date of eligibility. This date, in the case of dependents of noncareer personnel, is the same as the expected expiration date of the sponsor's tour of active duty.

In the past, the "expiration date" on the ID Card has been the governing factor in determining that eligibility still exists. Since the involuntary extension of the tours of duty of many servicemen is effective almost immediately, the probability exists that some still-eligible dependent wives and children may apply for civilian medical care to which they are still entitled. They may not, however, have in their possession the required proof of their eligibility.

No change is contemplated in the provision of our contract which states that claims may not be processed for payment until the dependents have proven their eligibility to receive care. Service personnel are being advised that it is their responsibility to take necessary action to "up-date" the evidence of dependents eligibility.

It is most probable, however, that some dependents will be in need of authorized medical care from civilian sources prior to the time this action has been completed. In such cases, the dependent has been instructed to explain the situation to the physician and hospital authorities. They have been advised to present, if available, some tangible evidence such as allotment checks, official orders, directives, or personal letters which state the pertinent facts to the physician or hospital to help support the dependent's claim of continued eligibility.

This office is not empowered to broaden the "good faith" aspect of our contract. The number of dependents temporarily "unidentified" who require medical benefits will not be large.

In view of the situation at hand, I would appreciate your assistance in encouraging physicians and hospitals to exercise patience and understanding during the next several months when their services are requested by dependents of these extendees.

I must emphasize, however, that no claims may be processed for payment unless the dependent has provided a valid DD Form 1173 or a statement of eligibility as required by our contract and as outlined in ODMC Letter No. 1-60.

This information is being furnished to all contractors and to the editors of leading medical and hospital journals. We would appreciate it if you could publish a copy of this letter, or an extract of the information in the next copy of your Medical Society journal or any other news media which is circulated to your membership.

Sincerely,
W. D. Graham
Brigadier General, MC, USA
Executive Director
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Curiosa et Trivia

WILLIAM B. McCUNNIFF

Don't throw your leaded apron away, but it is reported at the University of California that near-lethal doses of atomic radiation do not impair the abilities of female dogs to bear and wean pups.

Putting practicality ahead of science, in 1960, Boston's Children's Hospital purchased 93,500 lollipops. Average consumption to produce the desired effect was five per child.

Amen: Nikita Khrushchev, commenting on fat intake: ". . . eating very large amounts of certain fats is not without hazard, since the fat is deposited in various organs and interferes with their functions. Most harmful of all is the deposition of fat in the head."

About one fourth of American patients with venereal disease are teen-agers.

Since the Civil War, there have been only four Presidents who have outlived their expectation of life at inauguration. Mr. Hoover and Mr. Truman thus become members of a select group including only Grover Cleveland and William H. Taft.

Capsule Clinics

- Flagyl was administered orally in a dosage of 500 mg. twice daily for 10 to 20 men with persistent urethral discharge due to T. vaginalis infection. Negative smears were obtained in all patients four days after completion of treatment. Two reinfections occurred, one after one month and one after eight months. Both patients responded satisfactorily to retreatment. Feo, L. G., and Fetter, T. R., J. Urol. 86:154, 1961.

- Of 150 patients suffering from acute coronary insufficiency (presumably due to coronary thrombosis without infarction), 100 received anticoagulants and 50 (controls) were treated conservatively. Myocardial infarction developed in 3 per cent of anticoagulant treated patients and in 22 per cent of controls. Mortality among treated patients was one fifth that of controls. Wood, P., British M. J. 2:1779, 1961.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Washington Has Welfare Problems

A recent series of articles in a Missouri metropolitan newspaper gave the story of ADC in that area. It appears that the situation in Washington, D. C., is in as acute form as in many other cities. Washington's relief costs have multiplied six times since 1940. Among statistics on relief in Washington, of 28,600 Washington residents receiving relief, 74 per cent are mothers, many unmarried, and their children. In this group, 817 mothers and children have been on the relief rolls for 10 or more years, and 12 of the mothers have between 8 and 12 children.

White House Statistics

A recent compilation on the time spent in Washington by President Kennedy and former President Eisenhower showed that in the first nine months of their presidencies, each spent 179 days in Washington and each spent 94 days out of Washington. During the same period Eisenhower spent 23 days on business traveling outside of Washington and Kennedy 16. Days of relaxation outside of Washington showed 71 for Eisenhower and 78 for Kennedy.

Another Presidential Comparison

President Kennedy has made approximately 6,000 more appointments during his first nine months in office than did former President Eisenhower.

The bulk of the appointments or promotions in this administration dealt with the armed services. However, a change in personnel status for 3,570 civilian officers was proposed. Many among the civilians were replaced by the administration but others, especially in the foreign service, were original appointments or promotions.

Only 538 of the appointments submitted by President Kennedy went unacted upon. His withdrawals of nominations ran to 1,271, 1,243 being postmaster nominations that Mr. Eisenhower had submitted to the new Congress before he left office on January 20.

Confirmation was given for 3,460 Kennedy civilian nominations, including Cabinet members, federal judges, United States attorneys, customs collectors and foreign service officers.

Tax Collections Increase

The Internal Revenue Service has reported tax collections totaling $94,400,000,000 in the 1961 fiscal year. This was $2,600,000,000 more than in the 1960 fiscal year.

Gains were reported in all major categories except corporation collections, which fell $400,000,000 to $21,765,000,000. Individual income taxes totaled $46,153,000,000, of which approximately 33 billions was withheld from paychecks. Employment taxes totaled about $12,500,000,000, estate and gift taxes $1,900,000,000 and excise taxes 12 billions.

In Missouri total revenue collections were $2,271,508,000, and in Illinois, $7,556,673,000.

Hill-Burton Additions

Twenty-three Hill-Burton projects were approved in August. The number comprises 13 general hospitals, three public health centers, five nursing homes and two diagnostic and treatment centers. Nine of the projects are new facilities and 14 are additions, remodeling or replacements. The entire cost of the projects is estimated at $19,263,000, of which the federal share will be $6,559,000.

Mental Retardation to Be Studied

President Kennedy has appointed a panel of experts to study and make recommendations on treatment and prevention of mental retardation. The panel has held one meeting and set up working committees. Chairman is Leonard Mayo, New York, director of the Association for Aid of Crippled Children. Dr. George Tarjan, Pomona, Calif., medical director of the Pacific State Hospital, is vice chairman.

Other physicians on the 24 member panel are Drs. Robert E. Cooke, chief pediatrician, Johns Hopkins Hospital; Edward Davens, Maryland Department of Health; Louis M. Hellman, Chairman of the Department of Obstetrics and Gynecology, State University of New York; Seymour S. Kety, Henry Phipps Psychiatric Clinic; Reginald Spencer Lourie, Children's Hospital, Washington, D. C.; Horace W. Magoun, University of California, School of Medicine.

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Across
Missouri

Politics

While Washington is fairly devoid of anything political at the moment, politics has taken a spotlight in Missouri. It began the later part of October when Rep. Thomas B. Curtis, Webster Groves, announced that he would seek a seventh term in Congress. It was predicted that a Democratic candidate to oppose Congressman Curtis would be announced by December 1. Mr. John A. Stevens has expressed his intention to seek the GOP nomination for Congress from the same district, the Second District. Two Democrats, Edward L. Filippine, city attorney of Florissant, and Philip V. Maher, Jr., assistant St. Louis County counselor, have filed for the nomination.

Bid for More Industry in Missouri

Chairman of the new Commerce and Industrial Development Commission of Missouri, Lester E. Cox, Springfield, has proposed that Missouri join with eight other states in the Midwest to collectively attempt to attract new industry. The states he suggests are Illinois, Nebraska, Iowa, Kansas, Oklahoma, Arkansas, Tennessee and Kentucky.

Mr. Cox has also suggested immediate studies toward the locating of a cotton mill, a tannery and a sugar beet refinery in Missouri. It was reported that some steel companies are studying the possibilities of locating a mill in Missouri. The Commission also expects to try to obtain more military contracts. Mr. Cox pointed out that a recent report showed that $24,300,000,000 in prime military contracts were awarded through the year ending June 30 with California getting $5,300,000,000 of the contracts, and 10 other states received about two thirds of the money spent. The Midwestern states received $1,500,000,000.

Fewer Receive Old Age Aid

Missouri's old age assistance program continued its slow downward trend during September but two other welfare programs increased slightly.

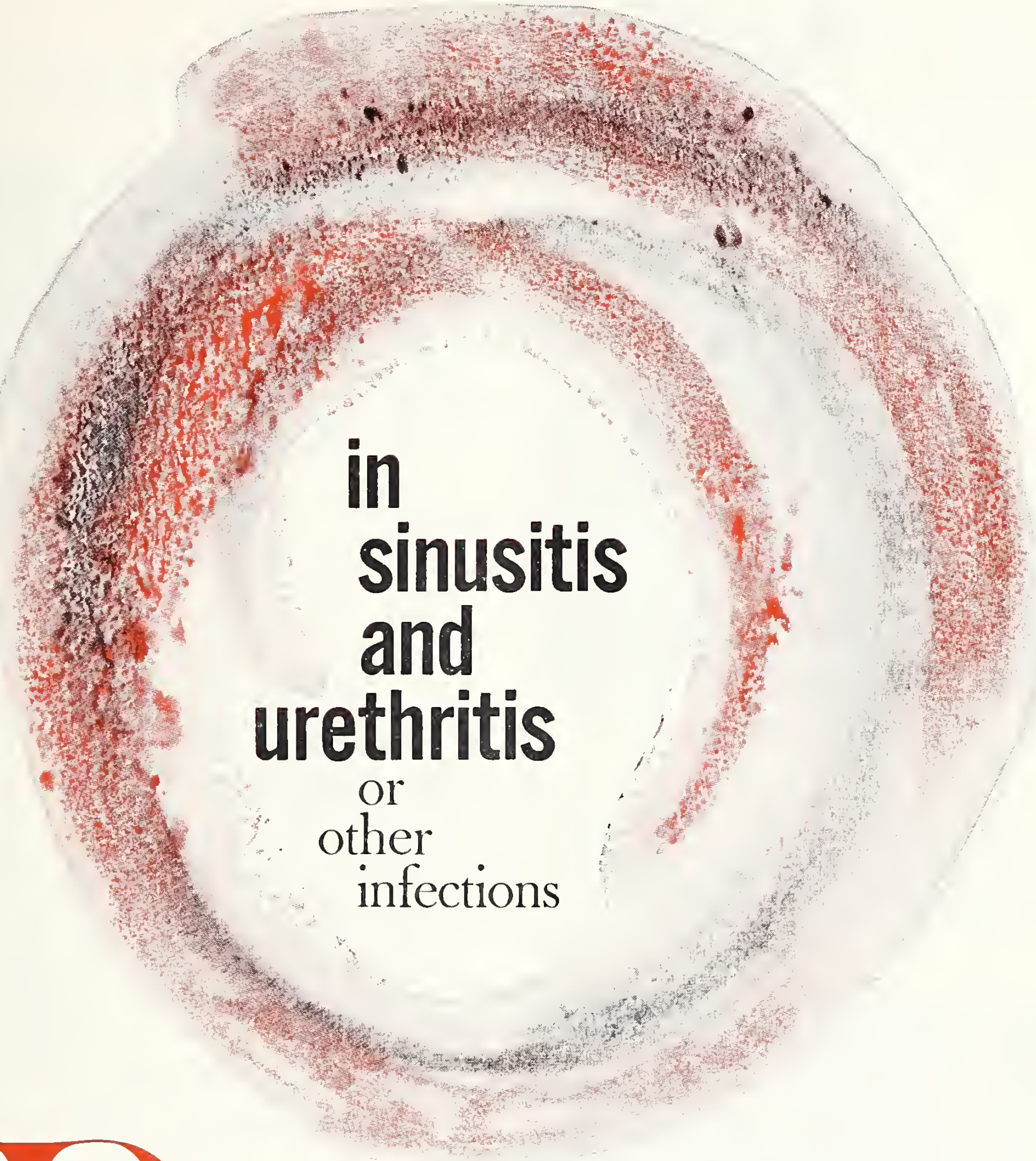
Welfare Director Proctor N. Carter reported that 112,509 older persons received $6,721,146 during September. That was 299 persons fewer than in August and the payments were down $40,619. The average grant declined 20 cents to $59.74.

Families getting aid to dependent children increased 126 to 26,555. Payments went up $20,277 to $2,467,147. The total number of mothers and children receiving help reached 93,696 and the average family grant was up 33 cents to $92.91.

Thirty-three additional persons qualified as permanently and totally disabled, bringing the total to 15,430. Payments increased $558 to $957,035 with the average grant declining 10 cents to $62.02.

NIMS

In an effort to improve postal service, the Nationwide Improved Mail Service has been established by the Post Office Department. It is directed principally toward business and industry and is based on staggering the depositing of mail so that the great bulk does not arrive at post offices after 5:00 p.m. The program calls for the establishment of local Mail Users Councils composed of the volume mail users in the larger cities throughout the United States to consult with the postmasters on ways and means to improve the postal service; encouraging the large-volume mailers to schedule their mailings so they can be handled in the order of importance to them, and cooperating with federal, state and municipal governmental agencies in arranging for the scheduling of their mails.



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C. G. STAUFFACHER, M.D., Secretary

Missouri Academy of General Practice

Two hundred fourteen doctors attended the 13th Scientific Assembly of the MAGP in Kansas City, November 4 and 5. Total registration was 403.

New officers elected as pictured (left to right) are: Roy W. Pearse, Jr., Nevada, President and AAGP Delegate; Chester Peck, Kennett, Board Member; Walter Gunn, St. Louis, President-elect; Edson Carrier, Kansas City, Alternate AAGP Delegate. Others elected not in the picture are: John Pearl, St. Clair, Vice President: E. W. Allen, Carrollton; Elvin Imes, Maryville; Barney Finkel, St. Louis, board members; Charles Metz, St. Louis, AAGP Delegate, and Walter Gray, St. Louis, Alternate AAGP Delegate; C. Gordon Stauffacher, Sedalia, Secretary-Treasurer.

Some of the officers were present to be sworn in.

Mr. Horace Cotton of Medical Economcis was the banquet speaker.

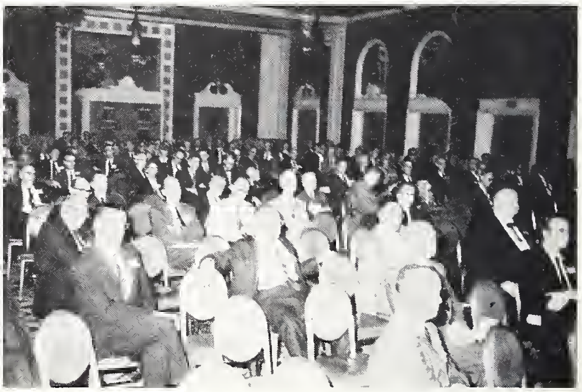
Dr. Wilson received the Academy award from Dr. Leitch.

Cecil G. Leitch, M.D., Blue Springs, automatically became Chairman of the Board of Directors as retiring President.

The Academy's Annual Award for outstanding leadership in improving health care was presented to Dr. Vernon E. Wilson, Dean of the University of Missouri School of Medicine, at the banquet by President Cecil G. Leitch.

The President's Installation Banquet was attended by 175 people. The featured speaker was Mr. Horace Cotton of *Medical Economics*. His subject was, "The Scrawl on the Wall for Medicine."

The presentations at the four scientific sessions were informative, practical and well attended. Forty-six technical exhibits were displayed.



Scientific sessions were well attended.

New from Saunders

1 **Graham, Sotto and Paloucek—Cancer of the Cervix**

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This authoritative new monograph, from the world-famous *Roswell Park Memorial Institute,* brings you today's latest information on the diagnosis and management of cervical cancer. The authors begin with an interesting discussion of the frequency, etiology and pathology of such lesions. There are extensive sections on diagnosis and therapy — including complications affecting management such as *pregnancy, prolapse of the uterus, carcinoma of a cervical stump, and fever.* You'll find fully illustrated coverage of techniques of obtaining material for Papanicolaou smears and performing cervical biopsy. Both irradiation and operative techniques are explained and illustrated in detail.

By John B. Graham, M.D., Chief Gynecologist; Luciano S. J. Sotto, M.D., formerly Attending Gynecologist; and Frank P. Paloucek, M.D., Attending Gynecologist. All of the Roswell Park Memorial Institute, Buffalo, New York. About 544 pages, 6½"x9¾", with 157 illustrations. About $15.00. *New—Ready in January!*

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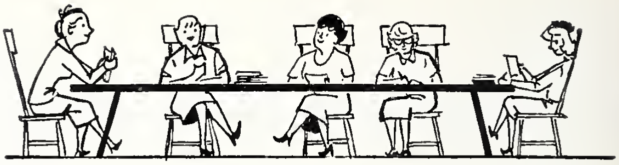
Woman's Auxiliary



The Pioneer Mother is memorialized for her courage and bravery in helping conquer New Frontiers. The survival of her family often depended upon her resourcefulness and ability to repel unfriendly attack from both man and Nature. She was a Pioneer by choice, and if the challenges became too great the family could always retreat back to civilization in the East.

Mrs. Frederick E. Wade

Today, all of us are pioneers in a new era of civilization, because for the first time in the history of mankind, the secret of total destruction has been solved. The Pioneer Mother today, has no choice except to live in our World as it is, and the only retreat suggested, is a temporary underground shelter. We pray that Pandora's Box may not be opened, but we are urged to prepare for any eventuality.

We may dream by our idealism, but we are told, we will survive by our realism. On January 6, 1941, President Franklin Roosevelt in an address before Congress outlined the Four Freedoms that our Nation would seek to make secure for the World. We are fortunate in America that in general principle we have the first three essential freedoms, freedom of speech, freedom of worship, and freedom from want. The fourth freedom he outlined, was freedom from fear, which translated into world terms called for a reduction of armaments to such a point and in such a thorough fashion that no nation could be in a position to commit an act of aggression against any neighbor anywhere in the world.

Today we seek more than ever this fourth freedom, but we realize that we cannot be ostriches and bury our heads in the sand, we must learn to live in a world of tension.

Early in October the national officers, committee chairman, and state presidents and president-elects assembled in Chicago for a conference and briefing session on Auxiliary program and goals. In reviewing this conference I find many statements that stand out as guideposts to give us direction.

Dr. Ernest B. Howard, assistant executive vice president of the American Medical Association, said that the A.M.A. is in its toughest fight since 1847, when it succeeded in setting standards for medical education. He pointed out that the campaign on the King Bill might well be the most important campaign in the history of medicine, because of the "dirty" tactics being used by our adversaries to promote this legislation.

It was consistently pointed out that we must convince the American people that we were fighting for All Americans, and not ourselves. Apathy has been the cancer of democracy, and to preserve the American way of life, we must arouse all to their citizenship responsibilities.

Leo Brown, assistant to the executive vice president of the A.M.A., made us realize what has happened to patriotism, when we contrasted the words of Nathan Hale, who said, "I only regret, I have but one life to lose for my country," when he faced a firing squad; with those of the American youth who said at his trial in Russia a year ago, "I didn't know what I was doing. I know now I was risking world peace, and my superiors are responsible."

Princess Catherine Caradja, of Roumania, spoke to us of her experiences living in a nation behind the iron curtain when liberty and justice were gone. She pointed out that 150 years before Christ Roumania was a kingdom with a capital, and before becoming captives of the Russians, they were a prosperous nation, being the third exporter of world oil, and the eighth exporter of wheat. She said now they could only serve as a horrible example to America because they felt it could never happen to them. She pointed out that 100 million people lived behind barbed wire as animals deprived of everything. You either submit to the tyranny, she said or you don't work, and if you don't work there is no ration for you or your children, and slow death follows. The Russians divide people into three classes, those they can buy, terrify or destroy.

Thirty million of the captives have died by being worked to death she stated or by being beaten to death because they were too weak to work. The sadistic means of destroying a nation is well refined. She said you never see a Russian

(Continued on page 1256)

Volume 58, Number 12—December, 1961

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Cardiac Arrest in Surgical Patients

Resuscitation of the surgical patient with cardiac arrest is discussed, based on a series of 46 patients. Thoracotomy and external cardiac massage are discussed and technics presented.

The authors are from the Surgical Services of the United States Veterans Administration Hospital, the Homer G. Phillips Hospital and the Washington University Department of Surgery, St. Louis.

Every physician will encounter cardiac arrest and must know the principles and technics of cardiac resuscitation. The technics of closed chest cardiac massage combined with ventilation by mouth to mouth breathing through the double airway (figure 1) and the use of the external defibrillator have made it possible to resuscitate some patients on the wards or outside the hospital and without thoracotomy. Our experience suggests that thoracotomy is the best treatment for most arrested hearts in the operating room.

It is necessary to reemphasize that all methods of resuscitation require immediate diagnosis and prompt team work to simultaneously restore ventilation and circulation before irreversible anoxic changes occur. This can be accomplished with minimum equipment. Most important is the courage, decisiveness and leadership of the doctor who is present. Knowledge and preparation have made it possible for all persons to apply the closed technics and, when thoracotomy is indicated, knowledge and preparation have made it possible for interns and surgeons of all ranks and specialties to open the chest and resuscitate their patients.

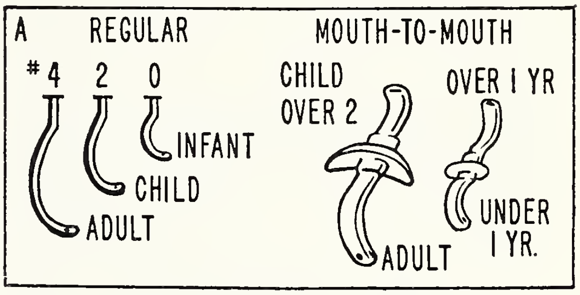

Fig. 1. Double airway (Safar tube) supplies airway for the patient and mouthpiece for the physician. Two airways are fastened together by taping their flanges as diagrammed. Two combinations will fit infants, children and adults. Reprinted with permission from *Resuscitation of the Unconscious Victim* by P. Safar & M. C. McMahon, Charles C Thomas, Springfield, Ill., 1961.

This paper reports experience with 46 surgical patients in two hospitals. The cases were unselected and consecutive. Arrests in the accident room or on the wards are not discussed.

Suspected arrest which resumed beat after a brief percussion or compression of the chest are not included. Forty-two of the 46 cases were proven and treated by thoracotomy. Four of the most recent cases were treated by external massage. Arrest occurred after topical or local anesthesia for minor surgery in some of these cases and emphasizes the need for preparation and vigilance under all circumstances.

Results

Twenty of these 46 cases were resuscitated and recovered completely by restoring circulation and ventilation in less than three minutes after arrest (figure 2). These successful cases ranged in age up to 84 years and occurred under various circumstances. No case in which resuscitation was delayed more than three minutes recovered completely and no cases with delay more than five minutes survived. Five cases resumed beat temporarily but died in hours or days from irreversible anoxic changes or from their underlying disease.

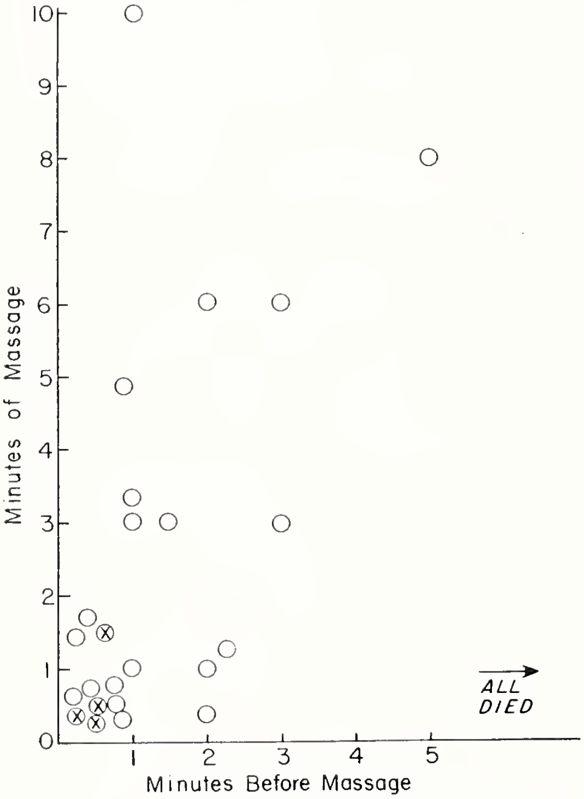

Fig. 2. Prompt massage and duration of massage in 20 survivors. Open circles recovered completely. Open circles with X died hours or days later from underlying diseases or from irreversible anoxic changes.

Complications of the thoracotomy were few. There were only three infections and one of these was avoidable. This patient developed empyema because a posterior chest tube was not used and pleural fluid accumulated and became infected. Empyema developed in a case of inoperable lung cancer because the diseased lung did not reexpand well. Another patient had an infected incision which prolonged his hospitalization.

Neurologic signs and symptoms were frequent for the first few days, but were transient in all cases except one. Transient changes in the electrocardiogram were also frequent. Permanent EKG changes occurred in a few cases, but these may have been the cause rather than the result of the cardiac arrest. These neurologic and EKG changes indicate the gravity of the catastrophe and the need for urgent recognition and treatment.

Ventilation of the lungs must be restored simultaneously with the circulation. Resuscitation failed in some of our cases because personnel or equipment were not available to establish the airway. When an endotracheal tube was in place or was inserted less than three minutes after cardiac arrest and massage, 48 per cent of the cases survived (table 1). An endotracheal tube, anesthesia machine and 100 per cent oxygen given by a trained anesthetist are ideal. These were not available in 13 cases and only four of those cases were resuscitated. Nine arrests occurred after topical or local anesthesia (table 2). Failure in six cases was due to inadequate airway because of insufficient personnel or equipment. Mouth to mouth breathing without the Safar tube and without knowledge and preparation has been ineffective. The tube

TABLE 1

ADEQUACY OF AIRWAY

	Cases	*Died*	*Saved*
Endotracheal	31	15	16
Inadequate	14	10	4

TABLE 2

ANESTHESIA

Anesthesia	*Cases*	*Died*	*Saved*
General	34	17	16
Spinal	4	3	1
Topical	6	3	3
None	1	1	0

Arrest can occur under any type of anesthesia.

(figure 1) is readily assembled by fastening two airways together with adhesive tape. Training of nurses or attendants in its use for mouth to mouth ventilation of the lungs will improve the results.

No patient with cardiac arrest can survive without prompt and adequate treatment, but the age and condition of the patient affects the frequency of arrest and the success of the treatment. Seventy-two per cent of the good risk, elective cases were saved. Only 36 per cent of the elective poor risk cases and 44 per cent of the emergency cases survived.

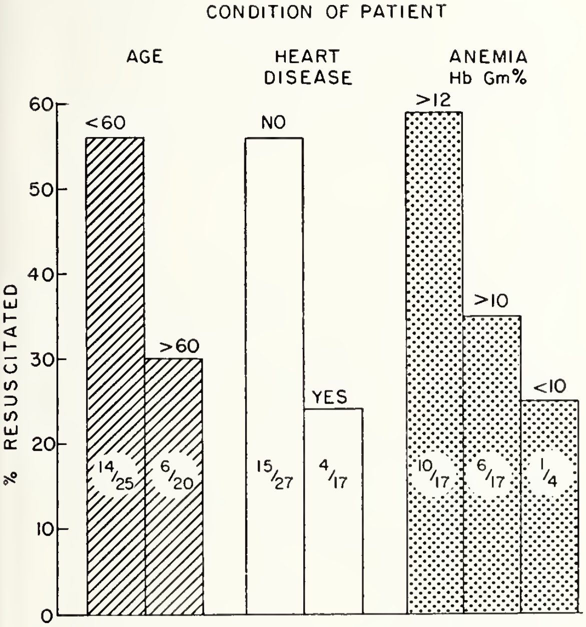

Fig. 3. Survival correlated with preoperative condition of the patient. The ordinate is the per cent survival. The fractions written inside the column have numbers of survivors as the numerator. The denominator is the number of cases in that particular category.

Age.—Figure 3 shows the success of resuscitation as influenced by age, heart disease and anemia. Most of our patients were adults, but children can and frequently do undergo cardiac arrest. The age distribution as shown in table 3 is similar to the age distribution of our patient population. Arrest was more frequent in the elderly patient partly because of the associated heart disease and the higher incidence of major surgery in this group over the age of 60. Resuscitation of an 81 year old female proves that the elderly heart can be revived.

TABLE 3
AGE

Age	*Cases*	*Died*	*Saved*
0-10	0		
11-20	0		
21-30	7	3	4
31-40	8	4	4
51-60	10	4	6
61-70	15	10	5
71-80	3	3	0
81-90	2	1	1

Cardiac Status.—The normal heart is more easily resuscitated. Hearts which had caused significant symptoms or EKG changes and/or required digitalis were resuscitated only 25 per cent of the time and therefore careful preoperative evaluation and preparation is essential. More than half of the normal hearts were restored to effective autonomous activity. Arrests during operations on the heart are not included in this series.

Anemia.—More than half of the cases with normal blood hemoglobin concentration were resuscitated. Anemic patients seem less likely to survive (figure 3). A lowered hemoglobin level decreases the oxygen carrying capacity of the blood and predisposes to anoxia and therefore elective surgery of any magnitude is not advisable if blood hemoglobin concentration is less than 10 gm. per cent. Failure or success at resuscitation depends on many factors in addition to blood hemoglobin concentration. An adequate hemoglobin level does not insure successful resuscitation if other adverse factors are present.

Prevention

Careful preoperation evaluation and preparation will prevent many cardiac arrests as well as improve the chances of successful resuscitation. Preoperative digitalis, correction of electrolyte, hemoglobin and blood volume deficits is advisable.

Conduct of the anesthesia is vitally important. The anesthetist must give correct premedication, avoid troublesome reflexes, avoid overdosage of anesthetic agents, maintain adequate airway, prevent carbon dioxide accumulation, maintain adequate blood volume and continously observe and monitor the patient.

Cardiac arrest can occur under any type of anesthesia. When it occurred under general anesthesia, 50 per cent of our patients were resuscitated (table 2). The anesthetist, the nurse and the trained attendent, the equipment to give 100 per cent oxygen were all available instantly. Successful resuscitation after local, topical or spinal anesthesia was frequently handicapped because of inadequate help or equipment and this can be corrected. A few cases died because the catastrophe was not recognized and confusion and uncertainty led to fatal delay. Surgeons and anesthetists must be vigilant and prepared during minor operations during which local or topical anesthetics are employed (Cases 2, 3).

The premonitory signs of acute cardiorespiratory collapse are variable. The anesthetist should institute corrective measures when cyanosis or hypotension or other warning signs occur.

If there is any question about the condition of a patient who is under anesthesia, discontinue anesthesia and administer 100 per cent oxygen. The surgeon must cooperate with the anesthesiologist and wait until the patient's condition is satisfactory to proceed. Cyanosis may not be detectable until the arterial oxygen saturation is dangerously low.

Hypotension may result from deep anesthesia drugs, hypoxia, myocardial weakness or inadequate blood volume, or from various other factors. Good airway, preoperative digitalis and reasonable replacement of blood and electrolytes before and during surgery and gentle surgical technic will help to prevent hypotension.

The changes in cardiac rate and rhythm may be frequent and varied. Alterations in the rate and depth of respiration must be regarded with concern. Progressive paralysis of the intercostal muscles causes a tracheal tug or a gasping type respiration.

Patients under local anesthesia may develop signs of cerebral anoxia such as: disorientation, excitement, loss of consciousness. Loss of ocular reflexes and pupillary dilatation are noted later. Some patients will have muscle twitchings and convulsions prior to circulatory failure. A patient under a local or spinal anesthesia may rapidly manifest all of these premonitory signs and develop cardiac arrest (Case 1).

READINESS

The surgeon and his team must be ready at all times because cardiac arrest will occasionally occur despite all precautions. Readiness requires certain minimum material, trained personnel and a vigilant state of mind.

The knife and Safar tube are always available. In the operating room the defibrillator and a small package of instruments including the rib spreader and hemostats is always sterile and readily available in the suite. Anesthesia machine and endotracheal tubes are in each operating room.

No anesthesia or operation is begun unless the nurse and attendant are ready and in the operating room and the surgeon is in the scrub room. Each must spring into action the moment the arrest occurs. On signal from the anesthetist or surgeon, open or closed chest cardiac massage is begun while the anesthetist restores the airway. If an anesthetist is not present, the attendant ventilates the patient with the Safar tube by mouth to airway breathing. These technics are simple, but must be performed correctly. Interns and surgeons of all ranks and specialties have performed a thoracotomy for cardiac massage.

Training prevents confusion and indecision. The surgeon is the leader and responsible person during the catastrophe, but administrative cooperation is necessary. Establishment of operating room policy, procurement of equipment, training of personnel and maintenance of standards of performance are the function of department heads.

DIAGNOSIS

The diagnosis of cardiac arrest is simple. There is no blood pressure and no pulses are palpable in a major vessel. Feeble myocardiac contractions may be present, but if there is no blood pressure and no pulse the heart beat is ineffective for carotid and coronary perfusion. Oxygenation will cause an occasional heart to resume beat without massage, but delay may be fatal. If there is no pulse or no heart beat, cardiac massage must begin immediately.

EXTERNAL CARDIAC MASSAGE

The relative merits of external cardiac massage and thoracotomy for resuscitation of surgical patients can only be determined after longer experience. Our present policy is to use external massage for: (1) arrest occurring outside the operating room, (2) children, (3) arrest during induction of anesthesia, drug reactions, and (4) patients with severe pulmonary disease.

External cardiac massage restores pulsatile circulation without surgery and can be applied anywhere by trained personnel, not necessarily doctors. It will be particularly effective for children because of their flexible rib cage. Before these technics were reported, we encountered two adults who might have been salvaged by this technic—one case vomited, aspirated and died before a surgeon or anesthetist arrived. A trained nurse and aid today might restore or maintain life until physicians and equipment arrive. Another case had extensive bilateral tuberculosis and the extensive pleural adhesions delayed exposure and massage of the heart. Possibly closed chest massage could have saved this man.

Cardiac arrest during induction of anesthesia may be readily resuscitated by external massage. We performed thoracotomy for seven arrests before or during induction. The three that died would not have been saved by external massage. Three other cases would probably be saved today without thoracotomy.

The attendants raced one patient down the corridor to the operating room, where thoracotomy and endotracheal intubation saved his life. Today the same attendants could restore circulation and ventilation immediately and maintain life until the doctors came. Thoracotomy would be unnecessary today in two other cases which occurred during induction (cases 2 and 3).

Serious and fatal complications of external cardiac massage have been reported, such as multiple fractured ribs (15 patients), hemothorax and hemopericardium and bone marrow embolism (five cases),[1] and lacerations of the liver (three cases).[4] There are many other complications which are not reported. Doubtless further training and experience will prevent many of these complications as it has with thoracotomy. Three cases of infection occurred among our 20 survivors after thoracotomy and would not have occurred with external massage.

External massage can be instituted with less delay than thoracotomy. Until the house staff was trained, an important cause of delay was tardy diagnosis, indecision and reluctance to perform the thoracotomy. Now external massage may maintain life during preparations for thoracotomy, but when the training, equipment and state of readiness are maintained in the operating room, thoracotomy can be easily performed within the three minute deadline.

Inadequate ventilation and airway will frustrate resuscitation by any method and must be corrected simultaneously with the restoration of pulses.

Technic of External Cardiac Massage.—Details of this technic of emergency resuscitation have been published.[2, 5, 6] Thoractomy may not be necessary if carotid pulses are palpable during this external massage.

The heart is compressed between the sternum and the spine. The physician kneels astride or alongside the patient, places both hands crossed on the lower sternum and presses vigorously at one second intervals. Another person inflates the lungs after each four compressions. Rhythm and teamwork is essential. A third person feels the neck to observe the carotid pulses. It may be necessary to break ribs in order to compress the heart sufficiently.

The assistant inserts the Safar tube which holds the tongue forward. Mouth to mouth breathing without an airway has been futile in our experience and that of others.[6] The rescuer's fingers hold the jaw forward and the thumbs squeeze the nose and the lips shut to prevent leaks while he blows through the tube to inflate the patient's lungs after each four compressions of the heart. While blowing he watches the patient's chest rise, then he stops and the elastic recoil of the lungs and chest wall empty the lungs and the surgeon resumes rhythmic compression. Rhythm is important so that the massage and ventilation do not interfere with each other and so that no moment is lost.

The requirements for success are the same as thoractomy, namely: (1) prompt diagnosis, (2) instantaneous restoration of circulation and oxygenation, (3) efficiency achieved by training and rehearsal.

THORACOTOMY FOR CARDIAC MASSAGE

Thoracotomy is preferable for resuscitation of most cases in the operating room. There are certain advantages and the trained personnel and equipment are instantly available, complications are few. One can most effectively compress and empty the heart at a rate which is regulated by the rate of filling. Eight cases in our present series had blood volume deficits, and slow filling of the heart suggested the need for transfusion of these patients. Thoracotomy also immediately reveals ventricular fibrillation. Defibrillation is most effective when the normal color and tone have been reestablished by massage and good ventilation of the lungs. Observation and palpation of the heart reveal signs of the previous heart disease, cardiac dilatation, the efficacy of massage and the resumption of beat.

Technic of Thoracotomy and Cardiac Massage.—The heart is exposed through an intercostal incision beneath the left nipple or in the submammary fold. No time is wasted preparing skin or counting ribs. The bloodless incision confirms the diagnosis. The heart is grasped and squeezed firmly and briskly 60 to 70 times per minute under previously described technics. Massage is adequate if carotid pulses are felt. If the heart does not resume autonomous beating immediately, open the pericardium with scissors and insert the hand. This permits more effective grasp of the heart with the thumb in front and the fingers behind. Occasionally the heart will be fibrillating, but this is unimportant at this moment. Massage is necessary to deliver oxygenated blood to the brain and to the heart muscles. The heart must be massaged until the myocardium is pink before the defibrillator is applied. Do not press too firmly with the thumb during massage. The beat is usually restored after two or three minutes of effective massage (figure 2). Sodium bicarbonate, 4.5 gm., are given intravenously to correct acidosis if the beat does not resume after a reasonable period, of five to ten minutes massage. Drugs may also be necessary. Three to 5 cc. of (1:10,000) epinephrine solution injected into the right ventricle may start the heart. Continue massage and if necessary repeat the epinephrine injection. Ventricular fibrillation may occur after epinephrine. The electrocardiogram may reveal ventricular fibrillation that is invisible. If the adrenalin is ineffective, inject 5 to 10 cc. of a 10 per cent solution of calcium chloride into the right ventricle. Calcium may increase myocardial tone and enable good contractions with a normal rhythm. Isupril, 0.2 mg., is preferable to epinephrine when available because it does not promote fibrillation. The need for drugs is a poor prognostic sign. Massage must be continued as long as the myocardium has good tone and is not cyanotic and flabby. Poor cardiac filling is a bad sign unless it is corrected by elevating the legs or by transfusion. Resuscitation may require an hour or more of massage, no arbitrary time limit is imposed so long as heart tone, filling and color are adequate.

When the heart resumes its autonomous beat and maintains an effective blood pressure (90 to 100 systolic) for 10 minutes, the pericardium is closed loosely to permit drainage and chest tubes are placed in the second intercostal space anteriorly and the eighth or ninth intercostal space in the posterior axillary line and connected to water seal drainage. The ribs are approximated with pericostal sutures of number one chromic catgut which are tied while the ribs are held together with towel clips or Bailey rib approximator. A layer closure is preferable for the muscle. All equipment for resuscitation should accompany the patient to the recovery room.

Case Reports

The following case reports illustrates some of the problems and technics of resuscitation.

Resuscitation by External Cardiac Massage

Case 1. This 39 year old woman had cardiac arrest during endotracheal general anesthesia for closed reduction of a fractured femur. The monitor called attention to the catastrophe and external cardiac massage was begun immediately and maintained good pulses. After five minutes, spontaneous heart beat and respiration returned. Postoperatively she had acute cardiac failure and some electrocardiographic signs of myocardial ischemia, but there were no neurologic signs and she recovered completely.

Case 2. This 46 year old man was being bronchoscoped under topical anesthesia because of major hemoptysis. Arrest occurred as the trachea was being aspirated. External massage was begun immediately and a cuffed endotracheal tube was inserted for positive pressure artificial respiration. Within one minute spontaneous heartbeat and respirations were resumed. The patient was unconscious for 24 hours, but recovered completely and had right middle lobectomy one week later.

Resuscitation by Thoracotomy and Cardiac Massage

Case 3. This 67 year old man entered for treatment of cancer of the larynx. Laryngoscopy under topical anesthesia revealed a large cancer in the right pyriform sinus and the subglottic area. Respiration and pulses stopped. A nurse and orderly were present and the circulating anesthetist appeared immediately and inserted an endotracheal tube and inflated the lungs while the surgeon opened the chest and massaged the motionless heart. In less than a minute autonomous beat was restored and blood pressure and respirations returned to normal quickly. After 10 minutes observation the chest was closed with tubes in place. A tracheostomy was performed to bypass the obstructing tumor. The patient had some residual weakness of one hand from the cerebral anoxia.

Comment: An otolaryngologist resuscitated his patient. External massage would make thoracotomy unnecessary for this patient today. However, it could not have been successful without assistance from the nurse and orderly. They are present for all minor procedures including endoscopy. Case 4 illustrates the need for this policy also.

Case 4. A healthy 54 year old man was given caudal anesthesia in the jackknife position for hemorrhoidectomy. He became excited, incoherent, twitched and convulsed. The orderly and anesthesiologist turned him onto his back. An endotracheal tube was inserted and 100 per cent oxygen was administered by positive pressure and intravenous fluids were started. His pulse became weaker and stopped. The nurse handed the surgeon the scalpel and he opened the chest. Massage of the motionless heart was begun within one minute after arrest. Autonomous beat resumed within three and one half minutes. Blood pressure rose and became stable. He remained disoriented and experienced loss of recent memory for a few days postoperatively, but had no permanent damage.

Comment: The jackknife position prevented endotracheal intubation. The injection of any local anesthetic is inadvisable after blood enters the syringe.

Case 5. (Resuscitation Three Times During Six Hours.) This 28 year old man had a cholecystectomy and common duct exploration for chronic pancreatitis. After closure of the incision, spontaneous respirations were not resumed. Various drugs were ineffective. Despite ventilation by hand cardiac arrest occurred one hour later. Massage restored autonomous beating and fair blood pressure, but then ventricular fibrillation began. The heart was massaged, then defibrillated and normal blood pressure and respirations were resumed. The chest was closed, but the patient then stopped breathing again and was ventilated by hand for another hour. The heart stopped a third time. The chest was reopened and the heart was fibrillating. After massage and defibrillation, normal sinus rhythm and effective blood pressure returned again. Three hours later spontaneous respiration resumed and he recovered completely.

Comment: The causes of the complication were not clear. The surgeon and anesthetists had the courage, persistence and the will to maintain life for six hours until recovery.

Case 6. (Recurrent Ventricular Fibrillation and Cardiac Standstill: Thoracotomy and Defibrillation.) This 33 year old man was admitted in shock because of a stab wound of the left chest, axilla and upper arm. A complete left pneumothorax was relieved by a chest tube and water seal drainage. Thereafter, the blood pressure and dyspnea improved and the lacerated axillary artery began to spurt. It was compressed and anesthesia was begun, but hypoxia occurred. The surgeon was palpating the femoral pulse and when it disappeared the surgeon opened the chest and found the heart quivering. The anesthetist improved the airway. Massage restored a carotid pulse and corrected the cyanosis and dilation of the myocardium. The defibrillator restored normal rhythm and then a forceful beat returned. The axillary artery and vein were then repaired. The blood loss was rapidly corrected. During this operation the chest was left open. During the closure of the wound the carotid pulse gradually disappeared again and the heart became dilated, cyanotic and motionless. Massage was started again and autonomous rhythm resumed in a few minutes. The patient recovered completely.

Comment: No time was wasted for EKG diagnosis. Thoracotomy permitted immediate massage and recognition and correction of (1) ventricular fibrillation, (2) hypo-volemia and, also, (3) the second episode of arrest. Defibrillation is most successful when the myocardium is well oxygenated. The color of the myocardium can be observed at thoracotomy. When external massage is used, the external defibrillators must be applied within a few minutes after arrest.

Case 7. (Supracondylar Amputation: External Massage, Unsuccessful Defibrillation.) This 76 year old man became hypoxic and pulseless in the recovery room after a supracondylar amputation of the leg under general anesthesia. Closed massage and mouth to mouth breathing caused palpable carotid pulsations and contraction of the pupils, but no spontaneous cardiac activity. Thoracotomy after 20 minutes revealed ventricular fibrillation. Defibrillation was accomplished, but no heart action returned and the patient expired.

Comment: This man was a poor risk because of preexisting heart disease and his advanced age. An EKG monitor and external defibrillator would have detected and treated the fibrillation without thoracotomy, but in their absence thoracotomy is preferable. The Safar tubes are now available and are more effective than mouth to mouth breathing.

SUMMARY AND CONCLUSIONS

Thoracotomy is preferable for the resuscitation of most surgical cases in the operating room. External cardiac massage is effective for some cases, particularly arrest that occurs during induction of anesthesia or outside the operating room. For resuscitation of patients with ventricular fibrillation without thoracotomy, EKG and external defibrillators should be instantly available.

Resuscitation by both methods requires training, preparation and teamwork by surgeons, nurses and aides.

Instantaneous decision and effective action will restore pulsatile circulation and adequate airway before irreversible anoxic changes occur.

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Diarrhea of Childhood and The Hypernatremic State

Childhood diarrhea was, without question, a major facet of pediatric practice. For many years it rated as a "number one" cause of death among small infants. With the advent of intravenous fluid therapy and practical methods of electrolyte determination, a new era of pediatrics was born. There were many opinions as to the exact amount and type of solution a child of a given weight or surface area should receive. However, most of these groups were in basic agreement.

The next major advance was the commercial preparation of oral hypotonic electrolyte solution (hereafter referred to as O.E.S.). These preparations were found to be a "two-edged sword," as a number of children under treatment, who appeared to be hydrated and improved, suddenly became acutely ill with convulsions and other central nervous system signs and symptoms, or expired.

Investigations of this syndrome led to the discovery of the hypernatremic state. Various authors have found the incidence of this state in routine admissions for diarrhea to be between four[11] and 21[5] per cent. It would appear that this group is important enough to warrant special consideration.

This paper presents the salient points published in the literature in chronological order, a survey of cases at Kansas City General Hospital from January 1, 1960, to February 1, 1961, and a comparison of the sodium and potassium contents of the fluids commonly used for oral therapy in infantile diarrhea.

Review of the Literature

A number of reviews[10, 12, 19, 21] have been written which present different concepts, proposed etiologies, and treatment of the hypernatremic state. An effort will be made to present these chronologically for purposes of review.

Rappaport (1947)[16] presented 14 cases of hyperosmolarity and hyperelectrolytemia in children with different pathologic conditions, and felt that a blood urea nitrogen or nonprotein nitrogen performed at the same time as electrolyte determinations would help distinguish hemoconcentration from true electrolyte imbalance. He described the "thick, rubbery sclerema-like consistency" of the skin in his "hyperelectrolytemia" state. Tarail (1953)[20] *et al* surveyed 191 pediatric patients with diarrhea over a period of 13 months with special reference to the determination of sodium and chloride ion concentration. He found 11 per cent had sodium concentrations between 149 meq/l and 153 meq/l; 9 per cent had sodium between 154 meq/l and 158 meq/l; and 7 per cent had a sodium of 159 meq/l and above. Seventeen per cent had a chloride concentration between 109 meq/l and 118 meq/l, and 12 per cent had a chloride of 119 meq/l and above.

Hypernatremia in infants with diarrhea was studied for more than a year and recommended therapy is discussed as well as the literature reviewed.

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Schoolman (1955)[18] *et al* reviewed 100 cases (adult and children) of hyperosmolarity, dividing them into three groups. Their first group of "primary desiccation syndrome" was characterized by listlessness, irritability and dehydration. The temperature ranged from 102 to 104 degrees, rectally; and they had five or six loose stools per day. There was a moderate elevation of the nonprotein nitrogen, and the patients of this group responded well to salt free fluids. Their second group of "central nervous system injury" patients was composed of five patients with hypernatremia following acute tubular necrosis; and the postmortem examination showed edema, gliosis, petechial hemorrhage, and encephalomalacia of the brain. Their third group of patients was that of "diabetic coma after therapy" which had all been treated with insulin and salt and no glucose. They felt that other factors than hemoconcentration must contribute to this state and that, in infants, hypernatremic acidosis was characterized by mildness of diarrhea and absence of shock. They also discussed the relation of intracranial lesions, diabetes insipidus, interruption of the supraopticohypophyseal tract, and that the hypernatremic state might be amenable to therapy with USP Pitressin and water. The question of the relationship of the pituitary adrenal axis to the hypernatremic state of childhood is raised, and they feel that the endogenous adrenal steroids produced by stress may contribute to the retention of sodium and to the hypernatremic state.

Finberg, *et al* (1955)[10] reviewed 81 cases of hypernatremia of various etiologies. Four of these developed diarrhea in the nursery, 69 were admitted with primary diarrhea, eight were admitted with respiratory disease, and seven had been admitted for evaluation of a metabolic disturbance. Of the 69 with primary diarrheal disease, eight expired with a mortality rate of 11.6 per cent. They felt that most of these were due to improper preparation of O.E.S. Two-thirds of this group had central nervous system findings and a lumbar puncture was performed on about one half or 46.4 per cent. Symptoms were described as moderate lethargy to coma, an irritable, high-pitched cry, and exaggerated deep tendon reflexes. The lumbar puncture showed an increased protein content without pleocytoses. They also state that the severity of neurologic symptoms are not related to the degree of hypernatremia. The clinical features they describe are lack of dehydration, prominence of neurologic signs, and the doughy or "sclerema-like" appearance of the skin was not consistent. They used 225 ml/kg total fluid with 15 meq of sodium per liter in the first 24 hours. They further state that hypocalcemia is common, and that this may be on the basis of hyperphosphatemia as indicated by the elevated blood urea nitrogen. They state, "the use of rapid dilution of the extracellular fluid by intravenous administration of glucose in distilled water may precipitate convulsions, even if the serum sodium is not reduced below the normal range." They recommend the use of 200 ml/kg in the first 24 hours with a sodium content of less than 40 meq/l. They also observed that, if the serum potassium was low with a high carbon dioxide content after initial treatment, that the electrolyte pattern did not return to normal until after potassium was taken by mouth. The reason for this can be explained in part, on impaired renal concentrating ability in the presence of potassium deficiency.[4]

Weil, *et al* 1956[21] described the clinical picture more completely and included (1) signs of depression of the central nervous system, varying from lethargy to coma, and noted that all deaths occurred in children who were comatose on admission, (2) increased muscular tone in all patients, (3) deep tendon reflexes were symmetrically exaggerated, (4) the presence of convulsions during the early phase of hydration (the spinal fluid protein varied from 30 to 32 mg. per cent), (5) the skin turgor was deceptively normal, (6) peripheral circulatory failure was not prominent, (7) the appearance of the sclerematous "putty-like" skin was infrequent and (8) marked thirst. They observed that, if convulsions appeared in the rehydration phase, they ceased when hypertonic saline was given to reestablish the abnormal high sodium level. They recommend a correction of the electrolyte pattern over a two day period. Their "optimal rehydration" was accomplished with a solution containing 50 to 65 meq/l of sodium, and 35 to 45 meq/l of chloride, and given at a rate of 180 ml/kg/day. This was made up of 1 part of $\frac{1}{6}$ molar sodium lactate, 2 parts of normal saline solutions, and 4 to 6 parts of 5 per cent dextrose solution. After 24 to 48 hours, the child was started on oral dilute milk.

Skinner, *et al* (1956)[19] state that the mortality of the infantile diarrhea patient with hypernatremia is five times greater than the normonatremic patient. They define the hypernatremic state as a serum sodium content in excess of 150 meq/l. Their clinical observations were (1) all patients had a profuse, prolonged, watery diarrhea, (2) some had fever, (3) all cases had a subnormal caloric intake because of anorexia or a low caloric formula, such as boiled skim milk and (4) most of the patients had received large amounts of sodium by mouth. Most of their patients were not clinically dehydrated, but the skin was described as "doughy" or "rubbery." Neurologic findings were present in most of their cases. They felt that the state was produced by (1) dilute diarrheal stools, (2) insensible water loss, (3) reduced water intake and (4) increased renal water requirement.

Finberg (1957)[6] found that the hypocalcemia occurred in hypernatremic infants, and was more common after treatment with saline containing solutions. He injected hypertonic saline into thirsting rats and found that they became hypocalcemic with a concomitant rise in body sodium and falling potassium. He also found that phosphorus retention and extracellular dilution of sodium was not a factor in hypocalcemia, but he felt that hypocalcemia was a result of alteration of equilibrium between extracellular and skeletal calcium. The same author (1958)[7] discussed the role of the physician in producing this state. He feels that feeding the acutely ill diarrheal patient his regular formula is not logical; and that the milk is irritating to the intestine in such cases. The time honored custom of feeding skim milk is less rational, as there is an excess load of phosphorus; and the solute per calorie load is even higher. The use of homemade solutions containing salt and carbohydrate may be abused and often may produce harmful effects. The occurrence of the hypernatremic state from commercial O.E.S. improperly prepared is well known. He suggests prepackaging this type of solution to avoid error.

Colle *et al* (1958)[3] reported an epidemic of hypernatremic diarrhea in Minneapolis and St. Paul in 1958. This study indicated a decrease in the concentrating ability of the kidney. They felt that contributing factors were (1) continued feeding of whole milk without supplemental water through the acute diarrheal phase, (2) feeding of O.E.S. alone with loss of water in excess of electrolytes, (3) the concentration of sodium in the water used to prepare the O.E.S. (some tap water may contain as much as 19 meq/l of sodium), (4) errors in preparation of O.E.S. and (5) early introduction of evaporated milk diluted with an equal quantity of tap water without added carbohydrates.

Finberg (1959)[7] reported that seven infants, who had this syndrome, developed subdural effusions or bleeding. He also reported one patient who had ingested a large quantity of salt and developed neurologic sequelae. It has long been known that subdural effusion may be associated with diarrhea in infants, and the question is raised as to whether these were unrecognized hypernatremic states. The same author (1959)[8] reports experimental work in which kittens were infused with hypertonic saline, producing lethargy, hyper-irritability, tremor and ataxia. The sodium rapidly passed into the extracellular spaces and freely diffused through the cell wall. Bleeding occurred in the brain tissues in 23 of 27 animals. This bleeding was felt to be a result of tearing of the bridging veins, secondary to cerebral edema, and expansion of the tissue. Two postulates are presented. The first is that hypertonicity of the extracellular fluid has a direct effect upon the brain cell, and second that the excess sodium under conditions of stress enters the brain cell and this accounts for the shrinkage of the extracellular space, thus causing a considerable functional impairment.

Harrison and Finberg (1959)[12] present a brief and excellent summary and discussion of this problem. They feel that the predisposing factors in the genesis of hypernatremic dehydration are (1) early infancy and prematurity, as the infant possesses a relative inability to conserve water through the renal mechanism, (2) interference with the oral intake of water by anorexia, nausea, vomiting, neglect and cerebral impairment which may lead to a lack of thirst, (3) excessive losses of electrolyte free water due to evaporation through the skin and lungs, (4) excessive losses of water in stools, (5) excessive administration of solute in the form of cow's milk or O.E.S., (6) salt poisoning by addition of salt to the feedings, and (7) excessive renal losses as in diabetes insipidus. In this hypernatremic state there is an increase in total sodium content of the extracellular fluid, but in subjects with severe water deficits the total extracellular sodium is reduced despite the high concentration of plasma sodium because of the reduction of the extracellular fluid volume. They feel that intracranial bleeding is produced by rupture of the capillaries and venules due to the change in the cerebrospinal fluid pressure. They also feel that the hypocalcemia and hypokalemia may be a result of impaired renal function. Their therapeutic regimen is initial treatment with a solution composed of 1 part of $\frac{1}{6}$ molar sodium lactate, 2 parts of normal saline solution, and 21 parts of 5 per cent dextrose in water. If the carbon dioxide level is less than 8 meq/l, the saline may be replaced with $\frac{1}{6}$ molar sodium lactate. The solution is administered at a rate of 200 ml/kg/24 hours. On the second day oral glucose with appropriate electrolyte may be given; and, if the urinary output is adequate, potassium should be added to the oral preparation at 3 to 5 meq/kg/day. Other points are, (1) daily weights, (2) anticonvulsant therapy to control convulsions, (3) subdural taps when indicated, and (4) 10 per cent calcium gluconate added to the intravenous fluids when indicated.

Franz, *et al* (1959)[11] surveyed 121 cases of diarrhea of which 68 had a hypernatremia. Twelve of these 68 had some degree of mental retardation. They feel that factors in the production of this state are (1) the presence of preexisting brain damage, (2) the administration of improper intravenous or subcutaneous fluids, (3) the improper use of noncommercial O.E.S. and (4) the improper use of commercial O.E.S. They further noted that, in a controlled study using commercial O.E.S. in the recommended manner, hypernatremia was not produced.

Luttrell *et al* (1959)[14] reviewed the cerebral lesions associated with hypernatremia and found (1) gross subarachnoid hemorrhage, (2) intradural hemorrhage, (3) intracerebral hemorrhage, (4) intraventricular hemorrhage, and (5) hemorrhage into the posterior lobe of the pituitary. They postulated that sinus thrombosis with hemorrhagic necrosis of the venous drainage of the cerebral hemispheres was the etiology of the diffuse hemorrhage in such diversified locations. They felt that contributing factors were the mechanical expansion of the edematous brain tissue in a closed carial vault and other chemical vascular changes.

De Young (1960)[5] reported that 10 of 47 diarrhea cases had a hypernatremic state with a sodium in excess of 150 meq of sodium/l. Of the 10, 60 per cent had convulsions, 90 per cent were comatose and 20 per cent expired. He also reports that the most commonly used treatment for diarrhea is boiled skim milk preparations and O.E.S., both of which may be dangerous if not properly prepared. Another cause of this syndrome is the use of normal saline solution, particularly if it is administered rapidly. He also feels that the mortality and irreversible intracranial damage is due to vascular damage with hemorrhagic manifestations.

SURVEY OF PATIENTS

Eighty-five children, who presented with diarrhea between January 1, 1960, and February 1, 1961, at Kansas City General Hospital were surveyed. Patients who had other diseases associated with diarrhea were deleted. The etiology and electrolyte pattern were analyzed. The etiologies (table 1) were found to be: Salmonella one case, or 1.2 per cent; Shigella two cases, or 2.3 per cent; pathogenic E. coli eight cases, or 9.4 per cent; coagulase positive staphylococcus four cases, or 4.7 per cent, and unknown, which probably represents viral infection or overfeeding 50 cases or 81.9 per cent. The diarrheas were further classified by serum sodium concentration (table 2 and 3). Fifteen and three-tenths per cent were classified as hypernatremic with a serum sodium above 150 meq/l. Sixty-five and eight-tenths per cent were classified as normonatremic with a serum sodium between 140 meq/l and 150 meq/l. Eighteen and nine-tenths per cent were classified as hyponatremic with

TABLE 1

ETIOLOGY OF DIARRHEAS

Kansas City General Hospital January 1, 1960, to February 1, 1961

	Number	*Per Cent*
Salmonella	1	1.2
Shigella	2	2.3
Pathogenic E. Coli	8	9.4
Coagulase Positive Staphlococcus	4	4.7
Unknown	70	81.9
Total	85	100.0

TABLE 2

CLASSIFICATION OF DIARRHEAS BY SERUM SODIUM CONTENT

Kansas City General Hospital January 1, 1960, to February 1, 1961

	Per Cent
Hypernatremic (Hypertonic) (Sodium greater than 150 meq/l)	15.8
Normonatremic (Isotonic) (Sodium between 150 and 140 meq/l)	65.8
Hyponatremic (Hypotonic) (Sodium less than 140 meq/l)	18.9

TABLE 3

DISTRIBUTION OF DIARRHEA PATIENTS BY INITIAL SERUM ELECTROLYTE DETERMINATIONS

Kansas City General Hospital January 1, 1960, to February 1, 1961

Sodium (meq/l)	*Number*	*Per Cent*
Greater than 160	6	9.5
150-159	7	11.1
140-149	34	54.0
130-139	11	17.5
120-129	5	7.9
Total	63	100.0
Chloride (meq/l)		
Greater than 160	1	1.5
150-159	1	1.5
140-149	3	4.6
130-139	6	9.2
120-129	11	16.9
110-119	22	33.8
100-109	18	27.7
Less than 100	3	4.6
Total	65	100.0

a serum sodium below 140 meq/l. Table 3 shows the distribution of patients by serum sodium and chloride determinations. This shows that most patients were normonatremic (54 per cent), whereas the peak distribution (33.8 per cent) of patients by chloride concentration was between 110 meq/l and 119 meq/l. The peak distribution of patients relative to carbon dioxide (meq/l) was 16.9 per cent from 11 to 13 meq carbon dioxide/l.

TABLE 4

CONTENT OF SODIUM AND POTASSIUM OF VARIOUS SOLUTIONS AND FORMULAE USED IN TREATMENT OF CHILDHOOD DIARRHEA

	Sodium meq/l	*Potassium meq/l*
Lytren	25[23]	25[23]
"7-up"	3.85[22]	0[22]
"Ginger Ale"	3.5[1]	0.15[1]
	4.0[15]	0.2[15]
"Coca-Cola"	0.5[15]	13.0[15]
Breast Milk	7.0[17]	14.0[17]
Cow's Milk	23.1[2]	36.2[2]
	25[17]	35[17]
	22[15]	36[15]
Skim Milk	22[15]	36[15]
Enfamil*	10.9[19]	17.9[19]
Similac*	11.6[2]	18.2[2]
Alacta*	21.7[23]	43.5[23]
Nutragigen*	17.4[23]	25.6[23]
Sobee*	21.7[23]	33.2[23]
Probana*	26.1[23]	30.7[23]
Tap water, city, without softener	0.2[3]	
Tap water, city, with softener	Up to 19[3]	
Salt Solution (1 teaspoon/1 qt. water)	12.5[15]	

* Recommended dilution of manufacturers.

Table 4 shows the serum sodium and potassium concentration of Lytren, carbonated beverages used in treatment of diarrheas in children, breast milk, whole cow's milk, skimmed milk, breast milk substitutes, other special formulas, city tap water, with and without water softeners, and of the so often used homemade electrolyte solutions.

Table 5 shows the sodium, potassium, and carbon dioxide content as meq/l in various formulas and beverages used in treatment of childhood diarrhea, as determined in the laboratory. Each figure represents the average of three separate determinations. It is interesting to note the discrepancy between table 4 and 5 as to the sodium and potassium content. This may be explained in part on the different electrolyte content of waters in different locations. It is also interesting to note the similarity of sodium and potassium content of "7-up" and breast milk.

TABLE 5

SODIUM, POTASSIUM AND CARBON CHLORIDE CONTENT OF SOLUTIONS AND FORMULAE USED IN TREATMENT OF CHILDHOOD DIARRHEA

(Determined at Kansas City General Hospital)

	Na meq/l	*K meq/l*	*CO_2 meq/l*
Similac	13.4	26	—
Enfamil	11.7	19.0	—
Sobee	15.0	33.0	—
"Ginger Ale"	2.45	8.9	78
"Coca-Cola"	3.07	9.1	74.4
"7-up"	6.4	12.5	80
Tap Water (Unsoftened)	0.68	0.18	—

DISCUSSION

Hypernatremic dehydration may be defined as a state in which serum sodium concentration is excessive (greater than 150 meq/l) and is usually, but not necessarily, preceded by diarrhea and/or an excessive oral, intravenous or subcutaneous intake of sodium. It is clinically characterized by (1) minimal water loss without evidence of circulatory embarrassment, (2) a deceptively well appearance, (3) extreme thirst, (4) signs of central nervous system involvement, including (a) lethargy to coma, (b) hyper-irritability despite extreme lethargy, (c) tremors, (d) exaggerated deep tendon reflexes, (e) muscle rigidity, (f) nucal rigidity, and (g) convulsions. The treatment is aimed at restoration of electrolytes to normal. The sodium level must be corrected over a period of 24-48 hours for fear of producing intracranial damage. Such damage as hemorrhage of almost any portion of the brain or meninges may occur with initial treatment, or as mental retardation at a later time.

The etiology of this state seems to include a number of contributing factors including (1) excessive intake of oral or parenteral sodium, (2) impaired excretion of sodium because of renal immaturity, or excessive loss of water relative to electrolyte loss, (3) the presence of previous brain damage and (4) possibly the derangement of the adrenal pituitary axis. Excessive oral intake of sodium can be produced by such simple error as preparing powdered formula using one ounce of powder and one ounce of water, or by giving normal saline by clysis. Three cases of hypernatremia have occurred in our practice in the conversions from the liquid to the powdered form of standard formula, which were improperly prepared by the mother who used one ounce of powdered formula to one ounce of water.

There appears to be no clear cut explanation of the severe neurologic difficulties that these infants develop once therapy is started. Finberg[8] reported a decrease in the extracellular space and, if the child is suddenly given a relatively hypotonic solution, i.e. 5 per cent dextrose, the brain cell or vessel cell would be further embarrassed or distended in an effort to equilibrate the osmotic pressures. This in theory would explain the diffuse vascular damage seen in autopsy specimen and animal studies, and explain some of the neurologic changes not found with hypocalcemia alone. If this postulate is correct, then the intracellular sodium should be corrected slowly over a period of 24 to 48 hours by slowly lowering the extracellular sodium.

The therapeutic regimen may vary from author to author, but all are in essential agreement. During the first 24 hours, the child should receive from 180 to 200 ml/kg of a solution containing between 15 and 65 meq of sodium/l. The sodium is either in the form of $\frac{1}{6}$ molar lactate, or diluted normal saline solution, or both. On the one hand, if a too dilute solution with respect to sodium is used, it may precipitate neurologic symptoms which may or may not be associated with intracranial damage and, on the other hand, a too concentrated solution may aggravate the hypernatremic state.

The second 24 hours of treatment will be based on the results of the first 24 hours. The fluids given the second day would depend upon the electrolyte pattern. If commercial O.E.S., skimmed milk or evaporated milk are used, it is suggested that they be given in a 1:1 (v/v) dilution of the reconstituted form or regular recommended concentration. In our laboratory "7-up" has shown a sodium and potassium content similar to that of breast milk.[17] It would be impossible, almost, for an infant to become hypernatremic using this carbonated beverage, but likewise it does not supply the needed electrolytes in a hyponatremic infant.

The cases of diarrhea at Kansas City General Hospital, from January 1, 1960, to February 1, 1961, were surveyed and showed the incidence of the hypernatremic state to be 15.8 per cent of those admitted with complaints of diarrhea. Four patients expired of 85 admitted, giving an overall mortality rate of 4.7 per cent. Only one child was hypernatremic, and considered statistically insignificant.

Summary

A literature review on the hypernatremic state in infantile diarrhea is presented and the recommended therapy discussed. All infants who were presented with primary diarrhea were surveyed at Kansas City General Hospital from January 1, 1960, to February 1, 1961. The survey reveals a 15.8 per cent incidence of hypernatremia. The sodium and potassium contents of solutions commonly used in the treatment of infantile diarrhea are compared.

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Intraperitoneal Hemorrhage Due to Fracture Of an Unsuspected Liver Cell Carcinoma

Case Report

A case of massive intraperitoneal bleeding due to fracture of a liver cell carcinoma with the patient recovering following surgical treatment is presented.

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Many sources of intraperitoneal hemorrhage are encountered in general surgical practice, most being involved with trauma of one kind or another. Blood is seen free in the peritoneal cavity following penetrating or blunt abdominal trauma sustained during accident or affray, and also is found associated with rupture of ectopic pregnancy, strangulated bowel, torsion of omentum, mesenteric thrombosis and rupture of intra-abdominal or retroperitoneal vascular structure. However, occasionally unusual instances of intraperitoneal bleeding occur which are, due to their interesting nature, worthy of special consideration.

Case Report

A. S., an 83 year old negro male entered St. Louis City Hospital No. 1 for the first time with a history of having been completely well until six hours prior to admission when he awoke, experienced a sensation of urgent need to defecate, went to his bathroom, fainted and fell. He was brought to the Receiving Room, was found to be in shock with a blood pressure of 62/40 and a pulse of 92 per minute. He was admitted to the Emergency Surgery Division with a presumptive diagnosis: Blood loss shock due to rupture of intra-abdominal vasculature or possibly gastrointestinal bleeding.

Past History—Normal other than occasional bright red blood coating his stools during the last one to two years. The patient had long-standing arthritis of the right knee. Review of systems was normal; he denied alcoholic intake or recent weight loss.

Physical Examination—Blood pressure was 60/00, pulse 120; respirations 38. He was pale with moist, cool skin. HEENT examination was not remarkable. Chest was clear. Heart showed sinus tachycardia, no murmurs and was not clinically enlarged. Abdomen was diffusely tender with generalized rebound tenderness. Bowel sounds were absent and there were no masses. There was generalized mild involuntary guard and moderate distension. Rectal examination showed no stool in ampulla. A 2 by 3 by 1 cm. polyp protruded from the anus, and was easily reducible. Genitourinary, neurologic, extremity and lymph node examinations were unremarkable.

Laboratory—Hct was 24 per cent. Urinalysis was normal except for a few red blood cells and an occasional white blood cell in each high power field. X-Rays: Obstruction series, chest film were not remarkable. Peritoneal tap produced gross dark red blood which did not clot within a 15 minute period of observation. Gastric aspirate was Guaiac negative. Prothrombin time was 51 per cent. BUN was 18 mg. per cent.

A diagnosis of massive intraperitoneal bleeding was made. Ten units of blood were typed and cross-matched for the patient and he was transferred to the operating room.

Operative Findings—Under general endotracheal anesthesia the abdomen was explored through a generous midline incision. Approximately 2,000 cc. of whole blood was aspirated from the peritoneal cavity. Exploration was unrevealing except for 6 cm. diameter spherical mass present near the posterior border of the right lobe of the liver along the inferior surface. A 2.1 by 2 cm. irregular, ragged fracture was present in the capsule of this mass. Dark red blood oozed briskly from this defect. The entire mass shelled out easily from the surrounding liver parenchyma and was submitted for frozen section. A diagnosis of "Hepatoma, degree of malignancy to be determined on permanent section," was made. Bleeding was controlled by a gauze pack which was brought out a right upper quadrant stab wound. A Penrose drain was laid in the area and the abdomen was closed. Interrupted No. 27 stainless steel wire sutures were employed in the fascia and 0000 black silk interrupted sutures were employed in the skin. Postoperatively the patient did well, slowly improving in spite of a postoperative wound infection, and was transferred to Koch Intermediate Care Hospital on the fortieth postoperative day.

Final tissue diagnosis—Hepatoma, hepatocellular carcinoma with capsular rupture and hemorrhage; post necrotic cirrhosis. Tumor plugs were found within a small venule.

DISCUSSION

Primary liver cell carcinoma is extremely uncommon when compared with the incidence of metastatic carcinoma to the liver. The Warvi classification is modified by Ackerman as follows:

PRIMARY LIVER TUMORS

I. Primary tumors without hepatic elements (fibrous, vascular adrenal rests, etc.)
II. Hepatomas:
    A. Adenomas
    B. Liver cell carcinomas
        1. With cirrhosis
        2. Without cirrhosis
III. Cholangiomas:
    A. Adenomas of intrahepatic bile ducts
        1. Solid
        2. Cystic
    B. Carcinoma of intrahepatic bile ducts
IV. Cholangiohepatomas (both liver and bile duct component)

Ackerman states that the diagnosis of liver cell carcinoma must be made not only on the basis of gross and microscopic appearance but also on clinical follow-up, as the true adenoma of the liver, though rare, may shade imperceptibly into carcinoma. Blood vessel invasion is characteristic of liver cell carcinoma, and no connection with the bile duct system is found. The incidence of liver cell carcinoma varies widely with sex, race, age and geography. In general, males in the 45-60 year age group are most affected although this carcinoma has been reported in the infant. The incidence has been found to be high in Africans and Orientals. In the United States the autopsy incidence is 0.26 to 0.4 per cent.

Common clinical features include abdominal mass, weight loss, abdominal pain, jaundice, ascites, splenomegaly. In adults concomitant cirrhosis is the rule. Ninety per cent of adults with liver cell carcinoma have cirrhosis, while in those with carcinoma of the intrahepatic bile ducts a 37 to 50 per cent incidence of cirrhosis is found. Dietary factors, ingestion of azo dyes, and parasites such as the liver fluke have been implicated as etiologic factors.

Grossly, three types of liver cell carcinoma are found: (1) nodular, where multiple discrete nodules are found throughout one or both lobes; (2) massive, where a single large tumor occupies one lobe; and (3) diffuse, where the tumor has invaded extensively throughout all or part of the liver. Although wide variation is encountered, the tumor on gross cut section usually appears gray or reddish-gray with areas of necrosis, hemorrhage and vascularity. Microscopically, the tumors are composed of columns and cords of liver cells forming atypical lobules. Hyperchromatic nuclei and multinucleated cells are found, and marked capillary vascularity is common. Tumor is found invading blood vessels. Metastasis occurs by the portal vein to the lungs and to regional nodes. Eventual invasion of a major portal vessel with intraperitoneal hemorrhage is a frequent terminal event.

TREATMENT

Radiation and chemotherapy have thus far offered little to the treatment of liver cell carcinoma. At this time the only hope of cure lies on surgical extirpation of the tumor. Although the cure rate of radical surgical excision of such tumors surely lies below 50 per cent, the presence of a few long-term survivors justifies such procedures in selected cases.

COMMENT

Although liver cell carcinoma is in itself rare, intra-abdominal bleeding as a terminal event seems more the rule than the exception. This bleeding is commonly due to blood vessel invasion with rapid, massive exsanguination. Here, although intra-abdominal bleeding was present, the pathophysiology involved was unique. In evaluating the history it is difficult to state whether spontaneous fracture of this hepatoma with bleeding, weakness and falling occurred or fall with direct trauma to the nodule resulted in the injury. In either case surely the trauma involved was a minor one, due to the lack of finding of associated rib fracture, skin contusion, or bruising.

SUMMARY

1. Intraperitoneal hemorrhage may originate from many sources, the most common being blunt or penetrating trauma, mesenteric thrombosis, strangulated bowel, torsion of omentum, ruptured ectopic pregnancy and rupture of intraperitoneal or retroperitoneal vascular structure.

2. A case of massive intraperitoneal bleeding due to fracture of a liver cell carcinoma is presented, the patient recovering from his acute illness following surgieal treatment.

3. Primary liver tumors are classified. Liver cell carcinoma is discussed. Intraperitoneal bleeding occurs commonly in liver cell carcinoma

(Continued on page 1222)

Information Statement on Neonatal Jaundice

Prepared by the Committee on Fetus and Newborn of the American Academy of Pediatrics, February, 1961.

KERNICTERUS ("BILIRUBIN ENCEPHALOPATHY") is a generally preventable complication of severe jaundice, occurring almost exclusively in newborn infants, usually in those with erythroblastosis fetalis. Kernicterus is often immediately fatal: if the infant does not die, he later exhibits neurologic deficits which vary in severity from such isolated involvement as partial deafness to severely crippling athetosis. The risks associated with erythroblastosis fetalis are quite widely recognized, and the criteria for treatment of this condition have often been stated. The purpose of this statement is to emphasize that kernicterus is not limited to babies with erythroblastosis fetalis, but may occur with jaundice from any cause, and at various ages, and that efforts should be made to prevent all cases of kernicterus.

1. Bilirubin* is believed to be the toxic substance that causes the nerve cell damage in kernicterus.

2. The risk of kernicterus is related to the concentration of bilirubin in the serum, but the relationship is not a simple one. In erythroblastosis fetalis, when the concentration of bilirubin in the serum remains below 20 mg. per 100 ml., the risk of kernicterus is very low; when the bilirubin concentration exceeds 30 mg. per 100 ml., the risk is 50 per cent or higher.[2] On the other hand, examples of nonerythroblastotic kernicterus have occurred in association with quite low concentrations of bilirubin in the serum of infants who have received sulfisoxazole.[1]

3. It is possible that the risk of kernicterus is not related to the cause of the jaundice, but only to the concentration of bilirubin in the serum. Until this is proven or disproven, it is proper to regard any very jaundiced newborn, or one with excessively high serum bilirubin, as a high risk so far as kernicterus is concerned. In addition to the large number of different blood-group antigens that may cause erythroblastosis fetalis, the following conditions may be accompanied by dangerous concentration of bilirubin; hemorrhage into the tissues, infectious diseases, hereditary hemolytic disorders, and excessive dosage of certain drugs such as water-soluble vitamin K analogues.

4. Premature infants with erythroblastosis fetalis are more likely to develop kernicterus than are full-term infants. This does not necessarily mean that prematures are more vulnerable to bilirubin than full-term infants, because it has also been established that prematures are more likely to accumulate high concentrations of bilirubin in the serum. It may eventually be shown that prematurity per se increases the vulnerability to bilirubin, or perhaps it may be shown that in certain circumstances prematures are less vulnerable to particular serum concentrations of bilirubin. Until such evidence is available, the Committee suggests that one may consider that prematures are likely to develop kernicterus as the result of high concentrations of bilirubin in the serum, regardless of the cause of the increased concentration of bilirubin. However, it must be emphasized that the exact level of serum bilirubin that is dangerous varies with different babies; it is therefore impossible to specify a level that has universal applicability. This applies both to erythroblastotic and to non-erythroblastotic infants. Although 20 mg. per 100 ml. of serum has been shown useful in erythroblastosis fetalis, corresponding data are not available for non-erythroblastotic babies.

5. Kernicterus can occur at any age. This has been demonstrated by the onset of bilirubin encephalopathy at the age of 3 years or later in an occasional case[3] of familial non-hemolytic jaundice (Crigler-Najjar syndrome). It has not been proved that age per se is a factor in the risk of kernicterus. Until such proof has been obtained, one should consider that a patient of any age, whether premature or full-term, and whatever the cause of the jaundice, is likely to develop kernicterus if the bilirubin level is excessively high.

6. Exchange transfusion is still the only procedure of proven effectiveness in the prevention of kernicterus. Other methods have apparently not been effective in reducing the risk of kernicterus in infants with severe jaundice or high serum bilirubin concentrations, or are still unproved.[4] If hyperbilirubinemia is caused by blood group incompatibility, the blood used for exchange transfusion should be "compatible."

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* Bilirubin—unconjugated or "indirect reacting" bilirubin. "Direct reacting" bilirubin is bilirubin glucuronide. Bilirubin is insoluble and toxic. Bilirubin glucuronide is water soluble and apparently non-toxic.

The Weeders, Van Gogh, Bernard Koehler Collection, Berlin

STRAIN

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The best criterion of compatibility is that the donor red cells are not agglutinated by maternal serum even when the indirect Coombs' test is used for detection of possible incompatibility.[5]

7. In cases of erythroblastosis fetalis, it is easier to prevent severe jaundice and hyperbilirubinemia by early exchange transfusion than to reduce hyperbilirubinemia by later treatment. A single exchange transfusion done in the first few hours of life may be more effective than several late exchange transfusions. Thus, the possible need for exchange transfusion should be assessed early in neonatal life by routine search for early jaundice. It is essential to be prepared in advance, by prenatal Rh typing, and Rh antibody screening tests, for cases of erythroblastosis fetalis caused by Rh incompatibility.

8. Jaundice must be looked for with the aid of white light (daylight or white fluorescent light).[6] Yellowish light is of no value in the detection of early jaundice. One might expect that yellow light would accentuate jaundice, but actually it causes jaundice to be invisible. Ordinary incandescent lamps, in contrast to ordinary fluorescent lamps, produce a yellowish light that is very poorly adapted to the detection of early jaundice. (It is pink light that makes the skin look yellow.)

9. Kernicterus should be avoided by early search for jaundice in the neonatal period, measurement of serum bilirubin when jaundice seems excessive for the age of the baby, and exchange transfusion (or repeat exchange transfusion) of compatible blood when the bilirubin concentration in the serum threatens seriously to approach levels considered dangerous. By such a program, cases of erythroblastosis fetalis caused by ABO incompatibility, or E, c, K, and other blood-group incompatibilities, as well as unusual jaundice from other causes, will be detected and properly managed. It should be remembered that skin jaundice is frequently not consistent with the concentration of bilirubin in the serum. Bilirubin should be measured in all cases where there is doubt.

10. Standardization of procedure for bilirubin measurement is essential,* and search for other criteria for assessing the risk of kernicterus should be continued. Assessment of the risk of kernicterus must be based not only on bilirubin concentrations in the serum but on frequent and careful clinical evaluation of the patient, including neurologic status. One should not wait for signs of brain damage before doing exchange transfusion, but exchange transfusion should not be withheld from a baby with signs of kernicterus.[5] The risk of exchange transfusion itself, though almost negligible when done by experts, should be kept in mind. Unfortunately, 20 mg. per 100 ml. is not a magic number, since the critical concentration of serum bilirubin varies from baby to baby, due to variables most of which are unknown.

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* A tentative standard has been defined by a subcommittee of the Committee on Fetus and Newborn.[7] Although there is no unanimity of opinion as to the best method of measuring conjugated bilirubin, it is agreed that it should be measured in addition to total serum bile pigments.

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HEMORRHAGE—Continued

as a terminal event; however, this is most often associated with direct invasion of portal vasculature, and is not associated with fracture of tumor parenchyma.

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J. H. SUMMERS, M.D., ***Lebanon***

Hospital Physician Relations

Special Article

The need for good communication between the physician and the hospital administrator is discussed, as well as the possibilities of better patient care with fuller cooperation.

Dr. Summers presented this talk at the 39th Annual Meeting of the Missouri Hospital Association, October 11, in St. Louis.

Having studied a copy of your 1961 convention program, I want to compliment your fine program committee—and, of course, your very able Executive Secretary, Mr. Lloyd—for a truly outstanding job. One could not ask for a more impressive list of speakers to give informative talks on their particular areas of authority in the field of hospital administration.

As for myself, I can only say that I consider it a compliment to be listed among your speakers and that I am pleased to be able to be here with all of you. But I should warn you that even though I have had the privilege of serving for a number of years on the hospital board and medical staff of our hospital in Lebanon, Missouri, I am far from being an expert on the subject of hospital doctor relations, my topic for discussion.

Actually, I am sure that every one of you here today is better qualified than I to talk on this important subject because of your daily involvement in the complex problems on hospital operation and administration.

In fact, several months ago when I had the pleasure of meeting with your colleagues who make up the Southwest Regional Council of the Missouri Hospital Association, I came away with the feeling that I had received much more than I had been able to give in terms of fresh new thoughts on how to strengthen the working relationship between our hospital and medical staffs.

Largely as a result of that meeting, however, Mr. Lloyd has suggested that I reiterate today the gist of my remarks made at Springfield.

Certainly all of us would agree that there is need for an increased flow of communications between hospital administrators and physicians if we are to work together more effectively in providing better health care for people of our respective communities. Whatever we can do to improve patient care standards is, after all, our primary objective.

Based on 30 years of personal contact with hospital personnel, both at home and elsewhere throughout the state, I am convinced that in general the relationship between doctors and hospital administrators is excellent.

By and large our everyday relations are marked by mutual understanding of the other person's problems and an awareness of the contributions of every member of our professional health team to the total care of the patient. Each of us has an essential job to do in restoring the sick and injured to healthy, productive lives. As in any intra-personal relationship, of course, one recognizes that there will be moments when frictions may develop—when differences of opinion will crop up. This happens in every type of group enterprise, whether it is a business, a hospital or, for that matter, one's own family.

The important question is how do those who are involved try to resolve their differences. Do they take the attitude that every question is capable of solution if all parties concerned will act in the best interests of their common enterprise? Or do they approach every question feeling that right must inevitably rest with a particular segment of the group?

Personally, I believe that there is a certain validity to both sides of any argument—otherwise there would never be differences of opinion. Thus, when questions on occasion do arise between the hospital staff and the medical staff—on any problem—such questions need to be discussed and, with good will evident on the part of all concerned, a decision reached which takes into account divergent viewpoints. Fortunately, I think this is the prudent way we actually do operate our hospitals, to the benefit of the hospitals and public alike.

Naturally, we find a few people in any sizable group who have rather extreme ideas about the way things are being handled—about the aims of a certain person or group of persons—or perhaps about their own importance in relation to everyone else.

In recent months, for instance, I have read statements by a hospital administrator, on the one hand, who claimed that staff doctors in most hospitals are attempting to usurp the power of hospital trustees, and, to counterbalance this, the statement of a doctor who feels that some hospital administrators wish to establish dictatorial powers over the medical staff and tell doctors what kind of medicine to practice.

I do not mean to pass judgment on what others in the field of health perceive as threats to the hospital-doctor relationship. What I do strongly advocate, in the interest of all, is that each of us look into his own mind and ask this question: "Is my own behavior in the hospital environment predicated on selfless or selfish motivation?"

So long as we can honestly say to ourselves that our own actions are above reproach—which, I feel sure is the case here—we shall have no personal relationship problems that are insoluble.

If direct relationships pose no great problems for us, what then constitute our really troublesome problem areas?

To my mind there are at least three serious areas for concern. For purposes of grouping we might place all of them under the general heading, "Growing Pains."

First on the list, I would suggest, is the need for constructing more patient care facilities—hospitals, in some cases, but, perhaps more importantly, additional convalescent and nursing homes.

Second would be the urgent need for attracting and training vast numbers of new highly-skilled professional people—doctors, nurses, research and laboratory personnel, medical social workers, and every other type of health service worker.

And third, we need to do everything possible to check the costs of hospital care.

Suppose we take these points in order and briefly touch on several pertinent factors relating to each. Perhaps we may then find hopeful solutions to these truly awesome public questions which indirectly threaten all of us.

It is evident to anyone involved in the field of health—as well as to a large body of the public—that our fast-multiplying population means that we must begin making provision now for additional patient care facilities in the years ahead. Coupled with our population boom, of course, is the happy fact that people today are living longer than ever before—but, as a consequence, placing additional burden on existing hospital and nursing home facilities.

How to cope with this increasingly difficult situation demands our very best ideas and united efforts. Meanwhile, of course, our federal and state governments are loaning out and appropriating tremendous sums of taxpayers' money for construction of additional patient care facilities—which, by the way, I am not here to discuss today. I do, however, feel strongly that people like you and I must take the lead in our own communities in developing completely voluntary, localized programs designed to meet the patient needs of the people in our areas.

Some of these local action programs we have already instituted. To some extent, for example, hospitals are attempting to move chronically-ill patients out of acute beds and into less expensive nursing home beds, thereby permitting greater utilization of acute hospital facilities for emergency cases. At the same time, doctors—aware of the problem of overcrowded hospitals in some areas—are attempting to limit their admissions. And many smaller towns here in Missouri are getting new outpatient clinics, thanks in part to the Sears Foundation—and the strenuous efforts of hospital and medical associations such as yours and mine.

But more—much more—local effort is needed, particularly with respect to providing more nursing homes and convalescent homes. We must, as health leaders in our communities, work with others to overcome these critical problems.

Now, what about the problem of more professional personnel? I understand that currently we have about two and a half million people employed in the field of health. Of these, almost a million and a half are hospital employees, and about 250,000 are doctors of medicine.

All in all, our ratio of health service personnel to the nation's population is much higher than ever before in our history—something like 14 health workers for every 1,000 of population. Back in the early 1930's when I first began practicing medicine, I recall that the ratio of health service people to the general population was only about half this figure.

Despite what appears on the surface to be a favorable picture, however, it is apparent to all of us that great numbers of additional skilled people will be needed in the coming decade. For, although the nation's pool of health manpower has increased rapidly, public demand for health care services has grown even faster. Our population growth and increased longevity have only served to complicate the problem.

There are bright spots, of course. It is true, for example, that a present day physician (thanks to wonderful new technics, drugs and hospital facilities, as well as faster means of transportation, communication and so on) has a much higher productivity than his counterpart of just a few years ago. It is also equally true that today's skilled hospital staff has relieved the doctor of many previously time-consuming duties that took him away from his basic medical and surgical functions.

Still another important advance—this one in the field of hospital policy—is the development of progressive care programs which, as we know, permit better utilization of staff personnel by having the patient do-for-himself to the maximum degree possible. I personally believe that this is a wonderful idea, assuming, of course, that proper medical supervision is exercised with any such program.

Improvements in efficiency—beneficial and welcome as they are—do not, however, eliminate, but merely alleviate, the need for a much greater supply of qualified people to carry out the important work involved in all phases of the healing arts.

Some progress is being made in this direction by private and publicly-endowed programs. Our state medical association, for example, has recently launched a $50,000 Medical Student Loan Fund, making low-interest loans to young Missourians enrolled in any accredited medical school. I am also proud to say that our member-physicians have always contributed generously in support of medical education—in fact, last year donated almost $80,000 to the nation's 85 medical schools. Our Woman's Auxiliary, in addition to their annual fund-raising campaign in behalf of these same medical schools, conducts Career Day programs at various high schools throughout the state.

These are but a few examples of the action programs through which we provide assistance to medical education and the young men and women who are destined to be tomorrow's doctors, nurses and other health care specialists.

I'm sure your own hospital association is similarly engaged in many worthwhile projects designed to increase the flow of new blood into the health professions.

Yet, our own efforts, along with those of other private individuals and organizations, fall far short of actual need. My own greatest apprehension in this regard is that a "Big Brother" government will one day decide that it must do the job for us.

I shudder to think what would happen to our present high standards of hospital-medical care if the federal government—even though acting initially with the purest of motives—were to dominate our health education system. What would be the effect, I ask you, if our schools were to become unalterably dependent on government financing, and their school curricula determined largely on the basis of political and bureaucratic or socialistic considerations?

Napoleon, a man whom all of us will concede learned his political science lessons well, once said that firmly to establish control over a nation you first have to control its educational system. The message here is clear to all of us: Either we accept responsibility for actively supporting our health education system and help the schools attract increasing numbers of outstanding young people, or the government will —with public backing—have an opening to come in and do the job for us.

The third and final point I would suggest we consider for a moment is the need for halting—or at least slowing—the unprecedented rise in patient charges for hospitalization.

Understand, of course, I am not inferring that this is a simple problem involving the overcharging of patients for essential services; far from it. Nor do I mean to suggest that our spiraling costs of hospital care can be attributed to any particular group. This problem is as much the offspring of the medical staff as of any other group involved in hospital operation. And certainly all of us here today are conscious of inflation and other economic forces that have pushed costs up.

What I am saying is that those who rely on our hospital facilities—the public—are beginning to cry out in frustration and anger against the climbing costs of hospital care. They look at the nation's consumer price index, for example, and see that hospital rates have gone up faster than any other single item in the family budget. They cite the frequent increases in group hospital premiums as still another cause for alarm. When we consider that over the last 20 years hospitalization costs have gone up three times as fast as the over-all cost of living, we can surely appreciate the public's growing concern.

What can we do about it? I only wish we could devise some type of easy and effective solution. But you—as hospital administrators who combat this problem day in and day out—know better than I that there is no easy answer.

We have already touched on several promising ways of trimming our operating costs. But we must also avail ourselves of other cost reduction technics and procedures—such as shorter patient stays, systems of cost accounting and budget control, new labor-saving devices, wage and salary administration programs involving clearer definition of job responsibilities, and so on and so on. We simply cannot afford to stand still; we must use every available business technic to keep our overhead down and our operations efficient.

But perhaps what is needed more than any of these somewhat fragmentary approaches to greater efficiency is the acceptance by all members of the health team of personal responsibility for holding the line on costs of hospital operation. Before we, as individuals, can be expected to take on personal responsibility for a large and abstract entity such as a hospital, however, we need to recognize that rising costs pose a threat to our own jobs. We need personal recognition of the fact that what is happening is we are rapidly pricing hospital care out of reach of the market and into the arms of government.

How can we get people who are members of our hospital and medical staffs to see that the hospitals' problems are their own and that each of us must actively do everything possible to stem the upward surge of costs? Again, I confess that I can offer no easy or surefire solution.

It does seem apparent, however, that one way in which we can hope to achieve our objective would be to improve our internal systems of communication. If, for example, your hospital publishes an employee magazine or newsletter, this would be an excellent medium for getting across your message of everyone's personal responsibility for holding down costs. Periodic meetings with all members of the hospital staff might also prove beneficial.

With respect to enlisting greater understanding and support of your medical staff, I would suggest that here again improved communications could work wonders. For instance, does your hospital have an active liaison committee that keeps both the medical staff and hospital administrative group informed of each other's plans and thinking? Better still, does your hospital have medical staff representation on its board of trustees or advisory board?

Will Rogers used to say, "I've never met a man I didn't like." So often, it seems to me, the disunion of interests between some hospital policymakers and doctors would be replaced by mutual respect and harmony if only they could get to know each other better. Certainly the experience of those hospitals which have instituted better means of communication between the two groups has borne out this fact.

In conclusion, then, I have a deepseated conviction that when our two and one-half million hospital and medical staff people see the urgent need for personal economy and close cooperation within our hospitals, we are going to see the most abrupt braking action on hospital expenditures ever known.

My sincere hope is that our all-too-brief time together here today has, in some measure, helped bring into sharper focus our many common problems and objectives, foremost of which is good patient care at the lowest possible cost to the public. It is also my earnest hope that we can, by continuing to work together, achieve ever better, more effective health care for all the people of our home communities.

J. H. Summers, M.D.

President's Message

While the Keogh bill was not passed by Congress in the last session, there is a way to set up a retirement fund—through the government and tax free.

The plan is a simple one with a two-fold purpose. It supports one of the government's most important programs and also offers many benefits to the individual. For example: if one starts now purchasing a $100 E bond (cost $75.00) each month and continues that schedule for a period of 17 years and nine months (the time when the first bond reaches the first extended maturity period), one would have accumulated E bonds with a cash value of $22,348.

Then, if one is about to consider retirement, one can trade the E bonds for H bonds, adding enough to round it out to $22,500. Of this total $6,373 would be accrued interest, but under the exchange privilege, one would pay no taxes on this at the time of trade and not until the H bonds mature 10 years later, at which time income will probably be less, and if over 65 other exemptions apply.

From these $22,500 in H bonds one will receive Treasury checks for $506.25 the first year, $810 the next, then $900 a year for the next eight years to maturity. This is $75.00 a month, the same amount originally invested, and one will still have the $22,500 investment available for whatever use one wants to make of it. May I suggest you discuss this with a banker?

J. H. Summers, M.D.

EDITORIAL

NOT ALWAYS AGAINST

Time and again, and from many sources, one hears the criticism of the American Medical Association that it is always against things, never for them. The Murray-Dingle-Wagner bill, years ago, brought forth this argument; then the Forand bill, and in the last session of Congress the King-Anderson bill, There were bills before and there will be more to come—and the argument will be heard again.

That it has been used was evidenced by the comment of an AMA-sponsored conference speaker last spring. He ended his defense of the AMA being against things by calling attention to the Ten Commandments, eight of which start with "Thou shalt not."

Recently, at a meeting of a component medical society, Mr. James W. Foristel of the AMA Washington office, brought this out by saying "Some folks, labor leaders in particular, these days charge that organized medicine is against everything."

To refute this charge, Mr. Foristel pointed out that medicine in the early 1900's helped in the creation of a National Public Health Service, most of their early work being medical care to seafaring men; to the first immunization enforcement, and the Federal Food and Drug Administration.

Several highlights of the "for" instead of "against" were given by Mr. Foristel:

"In 1914 organized medicine successfully lobbied for the enactment of the Harrison Narcotic drug, prescribing and filing such information with the Treasury Department which administers the Narcotics Act. The identification, location and control of addiction would not be possible without such cooperation from medicine.

"In 1924 physicians succeeded in having enacted, through their lobbying efforts in Congress, the caustic poisons act. This was a law that compelled manufacturers of dangerous household substances, such as household ammonia, to place a label thereon, calling attention to its harmful effects on human beings and including on such label an antidote. Hundreds of thousands of lives of children have been saved by this effective federal law.

"In 1934 organized medicine lobbied for and assisted in the enactment of a modernized version of the food and drug act. Amendment and modernization of the original act was necessary because of the many new canning and packaging processes which came onto the American scene and which were not even contemplated when the original act was passed.

"In 1946 organized medicine supported the Hill-Burton Hospital Construction program. It was recognized that all during the war hospital construction had been neglected and that we had some catching up to do in this country on that construction void. This legislation provides some federal contribution and has resulted in a spurt in hospital construction to the point where we have in this country now five general medical and surgical hospital beds per one thousand of population.

"In 1950 the American Medical Association, representing organized medicine, not only lobbied for, but assisted in writing, a doctor draft act providing for an orderly call-up of physicians to remedy the situation which existed at the time of the Korean War outbreak, wherein reservists who had already served in World War II were being called up again, while others were not doing their stint.

"In 1959 organized medicine, through its national association, appeared in both the House and Senate testifying in favor of the federal Employees Health Insurance Program which was provided by a combination of Blue Cross and Blue Shield and the commercial companies and which insurance is paid for by both the employer, the federal government, and the employees, the federal workers. The support of this legislation indicated, without question, organized medicine's support of employer-employee type health insurance so long as it be of a voluntary character.

"In 1960 organized medicine supported a law now known as the Kerr-Mills Act. It provides that the federal government will participate with the states in state-operated programs to pay for the medical care of any person over age 65 who is in financial need and is not able to supply medical care from his own resources. Thus far 28 states have enacted state legislation to implement this program and there are three more which possibly will do so prior to the end of the year. There are several states whose legislatures did not meet in 1961 and, therefore, did not have an opportunity to institute such a program for the needy ill aged, but who probably will next year."

Ramblings of the Field Secretary

The St. Louis County Medical Society School Health Committee has moved into high gear and, among other worthwhile propects, sponsored a School Health Institute at the Clayton Community Center on Monday, September 11, from 9:00 a.m. to 12:00 noon.

Following the usual greetings and introductions, the opening formal presentation was given by Fred Hein, Assistant Director, Department of Health Education, American Medical Association, who spoke on "Current Trends in School Health Service Programs." Fred was at his usual top form in presenting this subject. His discussion set the stage for a panel presentation to follow entitled "Problems Encountered in Implementing School Health Service Programs." Panel members were: Guy N. Magness, M.D., a member, St. Louis County Medical Society School Health Committee, Moderator; J. Paul Guidry, D.D.S., St. Louis Dental Society; John G. Kellett, M.D., private physician, Lemay, Mo.; Mrs. Marie Adams, school nurse, Webster Groves School District; and Mr. Albert Cooper, Principal, Washington School, Normandy School District. Dr. Magness, in beginning the panel discussion, explained that each of the four speakers on the panel would present a short formal paper on the subject in hand from their point of view. Following these talks he requested that members of the audience be prepared to question the panel members with the idea of drawing out additional helpful information toward the solution of specific problems confronting those in attendance who deal with school health service programs. A lively general discussion period added considerably to the remarks made by the panel speakers.

Unfortunately, the hour of noon arrived too soon so that the moderator had to halt the discussion with many questions awaiting turn to be answered. As the formal wrap-up of the morning session, Fred Hein was called upon to summarize. His remarks were directed to specific points brought out in the full panel discussion period and served to drive home important points presented.

The St. Louis County Medical Society School Health Committee is composed of four members of the Society, namely: Drs. Roy A. Walther, Chairman; Guy N. Magness, B. Todd Forsyth and C. Howe Eller, Commissioner, St. Louis County Health Department. In addition to these physicians, the following people are members of the committee: Ivan C. Nicholas, Superintendent, Ladue School District; Marvin A. Wirtz, Superintendent, Special School District, St. Louis County; James Lindhurst, Hancock School District; J. Paul Guidry, D.D.S., St. Louis Dental Society; E. H. Jacobsmeyer, D.D.S., St. Louis Dental Society; Mr. Harold Leimer, Lutheran Schools; Father John Holland, Catholic Schools; Thomas McConnell, Private Schools, and Betty Carlin, M.D., St. Louis County Health Department.

This committee representing a broad prospective in the school health field has been working for considerable time now in establishing basic school health principles and are now directing their efforts toward the implementation of the principles and administrative procedures agreed upon.

Members of the St. Louis County Medical Society, located in various school districts of the county, are being requested to serve as consultants to certain schools in the area on school health problems. When one looks at the make-up of this school health committee, it is logical to feel that they will succeed in their efforts to improve the school health programs in the St. Louis County schools; because here we find, cooperating together in a most valuable project, people representing different groups which are vitally concerned and closely allied with the problems involved. The progress and results of this committee's actions are being watched with much interest and well wishes.

News—Personal and Professional

The Westminster College Alumni Association of St. Louis recently elected **Sydney B. Maughs**, M.D., Webster Groves, president.

"The Nature of Diagnostic Technics in Allergy" was the subject of a series of lectures presented by **Herbert J. Rinkel**, M.D., Kansas City, at the recent annual meeting of the Iowa Academy of Ophthalmology and Otolaryngology in Okoboji, Iowa.

The Tennessee Society of St. Louis has elected **Stanley F. Hampton**, M.D., St. Louis, president for 1961-1962.

Chairman of the medical-professional advisory board of the Kansas City United Cerebral Palsy Association is **Robert H. Fitzgerald**, M.D., Independence. **Paul C. Quistgard**, M.D., Kansas City, is a member of the board.

Effective on October 1, **P. V. Siegel**, M.D., formerly of Smithton, became Chief of the Records and Review Section of the Medical Branch of the Federal Aviation Agency, Washington, D. C.

A paper on "Congenital Absence of the Gallbladder" was presented by **Paul A. Knepper**, M.D., St. Joseph, in a symposium for the retirement program for Waltman Walters, M.D., Mayo Clinic, Rochester, on October 9.

Speakers in a series of classes on "Child Care and Development" held for young homemakers in Liberty during September and October were **Howard D. Adams**, M.D., and **F. W. Kratz**, M.D., Liberty, and **Theodore Edwards**, M.D., North Kansas City.

Recently elected Fellows of the American Academy of Pediatrics are **Donald B. Strominger**, M.D.; **S. N. Riggio**, M.D., and **W. F. Melick**, M.D., St. Louis.

Officers of the medical staff of Burge-Protestant Hospital, Springfield, recently elected are **Robert Duncan**, M.D., president; **Michael J. Clarke**, M.D., president-elect; **Samuel C. Wittmer**, M.D., secretary; **Lyle D. Litton**, M.D., treasurer, and **Cecil R. Auner**, M.D., and **Vernon W. Kolze**, M.D., executive committeemen.

The Health Club Comment group of Kansas City had as speaker at a September meeting **Milton Katz**, M.D., Kansas City. He spoke on "Physical Exercise and Your Heart."

The Seratoma Club of Fairmount had as speaker at a fall meeting **Wallace W. Graham**, M.D., Kansas City.

"Diagnosis and Management of Gastrointestinal Disorders" was discussed by Joseph B. Kirsner, M.D., Chicago, at the annual A. Morris Ginsberg Memorial Seminar of the Department of Medicine of the Menorah Medical Center, Kansas City, on November 28.

At a recent meeting of the staff of St. Louis County Hospital, **Robert C. Kingsland**, M.D., was elected associate chief of staff, and **Curtis H. Lohr**, M.D., was elected secretary.

The Medical History Group of the University of Missouri will have as speaker on December 7, Dr. James T. Barrett, Columbia, who will speak on "Cholera in Missouri."

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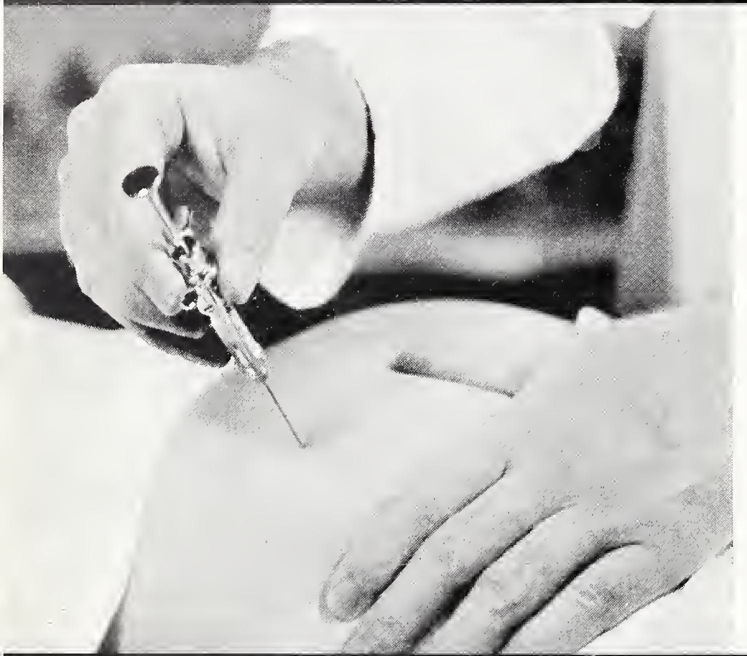

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1. R. Lamb and E. S. Maclean, Penicillin V—A Clinical Assessment After One Year, *Brit. M. J.*, July 27, 1957, p. 191-193. **2.** J. I. Burn, M. P. Curwen, R. G. Huntsman and R. A. Shooter, A Trial of Penicillin V, *Brit. M. J.*, July 27, 1957, p. 193. **3.** J. Macleod, Current Therapeutics, *The Practitioner*, 178:486, April, 1957. **4.** W. J. Martin, D. R. Nichols and F. R. Heilman, Observations on Clinical Use of Phenoxymethyl Penicillin (Penicillin V), *J.A.M.A.*, p. 928, March 17, 1956.

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New Members

Oliver Abel, M.D., 11152 Maryland Plaza, St. Louis, has become a member of the St. Louis Medical Society. Dr. Abel is a native of Missouri, received his preliminary education at Westminster College, and his M.D. degree at Washington University in 1955.

Douglas C. Appleby, M.D., 7543 Hoover Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Appleby is a native of South Carolina, received his preliminary education at Syracuse University Medical School and Charleston College, B.S., and his M.D. degree at the Medical College of South Carolina in 1955.

Catherine Boydston, M.D., Odessa, has become a member of the Lafayette-Ray County Medical Society. Dr. Boydston is a native of Missouri, received her preliminary education at Central Missouri State College, and her M.D. degree at Missouri University in 1960.

W. Wayne Boydston, M.D., Odessa, has become a member of the Lafayette-Ray County Medical Society. Dr. Boydston is a native of Missouri, received his preliminary education at N. W. Missouri State College, and his M.D. degree at Missouri University in 1960.

Fred Caldwell, M.D., Kneibert Clinic, Poplar Bluff, has become a member of the Butler-Wayne-Ripley County Medical Society. Dr. Caldwell is a native of Arkansas, received his preliminary education at Arkansas State College, and his M.D. degree at the University of Arkansas in 1960.

Joseph D. Callahan, M.D., 7227 St. Andrews Road, St. Louis, has become a member of the St. Louis Medical Society. Dr. Callahan is a native of Missouri, received his preliminary education at St. Louis University, and his M.D. degree at St. Louis University in 1957.

Joe D. Combs, M.D., State Hospital No. 3, Nevada, has become a member of West Central County Medical Society. Dr. Combs is a native of Missouri, received his preliminary education at Drury University and the University of Illinois and received his M.A.P.H.D. and his M.D. degree at the University of Georgia in 1941.

Paul A. Dewald, M.D., 4910 W. Pine St., St. Louis, has become a member of St. Louis Medical Society. Dr. Dewald is a native of New York, received his preliminary education at Swarthmore College, and his M.D. degree at Rochester University in 1945.

Edward G. Dewein, M.D., 1081 Raritan Drive, Rock Hill, has become a member of St. Louis Medical Society. Dr. Dewein is a native of Illinois, received his preliminary education at Washington University, and his M.D. degree at St. Louis University in 1959.

Thomas T. Egan, M.D., 4065 Germania St., St. Louis, has become a member of St. Louis Medical Society. Dr. Egan is a native of Iowa, received his preliminary education at Marquette University and Creighton University, and his M.D. degree at Creighton University in 1955.

Romar E. Hammes, M.D., 207 N. 5th St., St. Charles, has become a member of Lincoln-St. Charles County Medical Society. Dr. Hammes is a native of Iowa, received his preliminary education at the University of Iowa, and his M.D. degree at the University of Iowa in 1954.

John W. Higgins, M.D., 4910 W. Pine St., St. Louis, has become a member of St. Louis Medical Society. Dr. Higgins is a native of New York, received his preliminary education at Columbia University, and his M.D. degree at Cornell University in 1945.

Kenneth K. Hines, M.D., 100 N. Euclid Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Hines is a native of New York, received his preliminary education at the University of Buffalo and the University of Kansas, and his M.D. degree at the University of Buffalo in 1957.

William M. Irvin, M.D., 906 Olive St., St. Louis, has become a member of St. Louis Medical Society. Dr. Irvin is a native of Illinois, received his preliminary education at Southern Illinois University, and his M.D. degree at the University of Illinois in 1954.

Joseph F. Krivda, M.D., 3853 Wisconsin Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Krivda is a native of Pennsylvania, received his preliminary education at LaSalle University, and his M.D. degree at the University of Pennsylvania in 1959.

Jerome L. L'Ecuyer, M.D., 9313 Manchester Road, St. Louis, has become a member of St. Louis Medical Society. Dr. L'Ecuyer is a native of Kansas, received his preliminary education at St. Benedicts College, and his M.D. degree at St. Louis University in 1956.

Robert Leider, M.D., 457 N. Kingshighway Blvd., St. Louis, has become a member of St. Louis Medical Society. Dr. Leider is a native of New York, received his preliminary education at the University of Chicago, and his M.D. degree at the University of Chicago in 1955.

J. Barlow Martin, M.D., 934 S. Central St., St. Louis, has become a member of St. Louis Medical Society. Dr. Martin is a native of England, received his preliminary education at Amherst College and his M.D. degree at Washington University in 1955.

William V. Murawsky, M.D., 1501 Locust St., St. Louis, has become a member of St. Louis Medical Society. Dr. Murawsky is a native of Wisconsin, received his preliminary education at Marquette University, and his M.D. degree at Marquette University in 1954.

Toshio Nishi, M.D., 3811 Shaw Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Nishi is a native of Manchuria, received his preliminary education at Manchuria University, and his M.D. degree at Manchuria University in 1938.

Leroy Ortmeyer, M.D., 2523 Telegraph Road, St. Louis, has become a member of St. Louis Medical Society. Dr. Ortmeyer is a native of Missouri, received his preliminary education at St. Louis University, and his M.D. degree at St. Louis University in 1955.

Mabel L. Purkerson, M.D., 7509 York Drive, St. Louis, has become a member of St. Louis Medical Society. Dr. Purkerson is a native of South Carolina, received her preliminary education at Erskine University, and her M.D. degree at South Carolina University in 1956.

John V. Redington, M.D., 950 Francis St., St. Louis, has become a member of St. Louis Medical Society. Dr. Redington is a native of Illinois, received his preliminary education at Notre Dame, and his M.D. degree at St. Louis University in 1956.

Edward C. Rinck, M.D., State Hospital No. 3, Nevada, has become a member of West Central County Medical Society. Dr. Rinck is a native of Kansas, received his preliminary education at the University of Kansas, and his M.D. degree at the University of Kansas in 1929.

C. E. Ripley, M.D., 623 Pine Blvd., Poplar Bluff, has become a member of Butler-Wayne-Ripley County Medical Society. Dr. Ripley is a native of Arkansas, received his preliminary education at Arkansas A & M, and his M.D. degree at the University of Arkansas in 1960.

J. S. Sanders, M.D., 515 E. High St., Jefferson City, has become a member of Cole County Medical Society. Dr. Sanders is a native of Missouri, received his preliminary education at Washington University, and his M.D. degree at Missouri University and Harvard University in 1955.

John S. Schoentag, M.D., 5525 Enright Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Schoentag is a native of Wisconsin, received his preliminary education at the University of Missouri and his M.D. degree at Washington University in 1960.

A. E. Sevastianos, M.D., 3400 N. Kingshighway Blvd., St. Louis, has become a member of St. Louis Medical Society. Dr. Sevastianos is a native of Greece, received his preliminary education at the University of Athens, and his M.D. degree at the University of Athens in 1950.

Phillip M. Shepherd, M.D., El Dorado Springs, has become a member of the West Central County Medical Society. Dr. Shepherd is a native of Oklahoma, received his preliminary education at Oklahoma State College, and his M.D. degree at the University of Oklahoma in 1959.

Wendell Stewart, M.D., 9098 Swan Drive, St. Louis, has become a member of St. Louis Medical Society. Dr. Stewart is a native of Missouri, received his preliminary education at Washington University, and his M.D. degree at Baylor University in 1959.

Stuart Weiss, M.D., 634 N. Grand Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Weiss is a native of Missouri, received his preliminary education at Washington University, and his M.D. degree at Washington University in 1954.

DEATHS

Luckey, Horace L., M.D., 2825 Laclede Station Road, St. Louis, a graduate of Washington University, 1910; member of St. Louis County Medical Society; aged 77; died October 4, 1961.

Ayars, Treston R., M.D., 5861 Plymouth Ave., St. Louis, a graduate of Marion Sims, 1902; member of St. Louis Medical Society; aged 85; died October 7, 1961.

Mills, Warren B., M.D., 3720 Washington Ave., St. Louis, a graduate of Washington University, 1942; member of St. Louis Medical Society; aged 55; died October 10, 1961.

Kelley, Walter L., M.D., 9915 Gravois Road, St. Louis, a graduate of Chicago College of Physicians and Surgeons, 1914; member of St. Louis County Medical Society; aged 78; died October 11, 1961.

McCanse, Raymond A., M.D., 4437 Jefferson St., Kansas City, a graduate of Washington University, 1934; member of Jackson County Medical Society; aged 54; died October 16, 1961.

County Society News

FIRST DISTRICT

JOSEPH L. FISHER, ST. JOSEPH, COUNCILOR

GRAND RIVER MEDICAL SOCIETY

Members, their wives, and guests met at the Strand Hotel in Chillicothe for a regular dinner meeting on October 12.

Dr. Jacob Kulowski, St. Joseph, addressed the doctors on "Crash Injuries," particularly as related to the hip, femoral shaft and knee, and the effectiveness of seat belts in reducing the number and severity of injuries.

Mrs. Frederick Wade, State Auxiliary President, addressed the ladies in a separate meeting.

At the business meeting of the Society, Dr. Clark explained the AMEF solicitation of funds; also discussed was how best to comply with the state immunization law as related to public school pupils. It was pointed out that preschool immunization clinics have encouraged parents to escape their own obligation of providing childhood immunization.

Guests present were Dr. Jacob Kulowski, St. Joseph; Dr. and Mrs. Frederick Wade, Kansas City; and representatives of Rorer, Burroughs-Welcome, Organon, and Ross Pharmaceutical Companies.

FRANK R. DALEY, M.D., *Secretary*

SECOND DISTRICT

A. P. ROWLETTE, MOBERLY, SECRETARY

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

The annual public relations dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society, the doctors' wives and guests, was held at the Country Club in Moberly on Thursday night, October 12. More than 100 people were present to enjoy an excellent steak dinner and then an outstanding talk by Mr. James W. Foristel, Legislative Representative of the American Medical Association from Washington, D. C.

Mr. Foristel spoke on the subject, "The Role of Government in Medicine." In his discussion he pointed out numerous functions of government in the health field which have been generally accepted and which physicians over the country have supported such as: the classification of the National Public Health Service in the early 1900's; the Federal Food and Drug Act of 1906 and its modernized version in 1934; the Harrison Narcotics Act; the Caustic Poisons Act, requiring the labeling of dangerous household substances; the Hill-Burton Hospital Construction Program, the doctor's draft act of 1950; establishment of sanitaria for tuberculosis and institutions for the mentally ill. He pointed out that in 1960 the Kerr-Mills Act was supported by the AMA which provides that the federal government will participate with the states in state operated programs to pay for the medical care of any person over age 65 who is in financial need. The Kerr-Mills Law he said, is being challenged by "a vocal minority in the U. S.," who are urging Congress to enact a compulsory national health

Mr. Foristel drives home a point.

Drs. Fleming, Rowlette and Szymanski pose with Mr. Foristel.

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1. Barden, F. W., et al.: J. Maine M. A. 46:99, 1955.
2. Ford, R. A., and Blanchard, K.: Journal-Lancet 78:185, 1958.

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More than 100 people attended the meeting.

law which would provide medical care under the Social Security Act for all persons eligible for social security, their dependents and survivors. He pointed out that such a law proposed under the King-Anderson Bill would eventually bring about compulsory national health insurance for all the population, not just the aged. His discussion of the anticipated cost of such a program and its control over the freedom of all American citizens had a telling effect upon his audience. His entire discussion pointed out in an excellent manner those functions in the health care field in which government should rightly engage as against those functions in the health care field where the dead hand of government should not be felt.

Following Mr. Foristel's discussion, the many complimentary comments from those present were sufficient evidence to indicate the fine reception his talk received.

Dr. S. R. Szymanski, Moberly, president of the Society, presided over the evening festivities. The program for the evening was under the direction of the program committee, chaired by Dr. A. P. Rowlette.

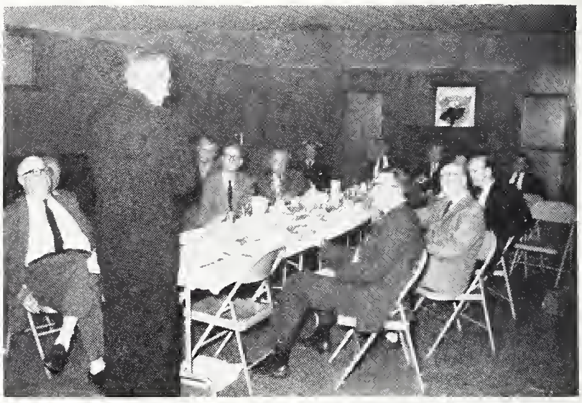
To this annual public relations dinner the medical society members and their wives invite lay friends as their guests with a special program of interest for all present.

J. Will Fleming, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

Twenty physicians were privileged to hear a most informative talk by Mr. Frank K. Woolley, Field Representative of the American Medical Association, at a dinner meeting of the Marion-Ralls-Shelby County Medical Society at the Moose Lodge in Hannibal on Tuesday night, October 17. Mr. Woolley discussed the socialistic trends that are running rampant in the U. S. today. He related these trends particularly to the promotion of health care of the aged under Social Security.

In his talk he presented an excellent background of the development of various proposals to centralize power and control over the entire American economy by a centralized government. He pointed out numerous ways in which individual and group efforts can well be directed to stop what seems to be a headlong surge toward more governmental control and paternalism.



Mr. Frank Woolley addressed the group.

Discussion continued after the meeting.

He emphasized the point that control over medicine is but one spoke in the total wheel of complete governmental control of our way of life.

Following Mr. Woolley's most interesting and informative presentation a lively discussion period followed.

In addition to local physicians who were present, Dr. Charles H. Lewellen and Dr. John K. Holcomb of Louisiana and Mr. Ray McIntyre, Field Secretary, Missouri State Medical Association, were in attendance as guests. The meeting proper was preceded by an enjoyable social hour followed by dinner and then the formal program.

Wyeth Hamlin, M.D., *Secretary*

FOURTH DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held Tuesday evening, October 24, at the Southern Air in Wentzville.

Evening festivities began with a social hour followed by a delicious steak dinner and then an outstanding scientific presentation by Seymour Monat, M.D., St. Louis, an Instructor in Clinical Obstetrics and Gynecology at Washington University School of Medicine. Dr. Monat spoke on "Bacterial Shock." He discussed a number of specific cases of this ailment with which he had been either indirectly or directly concerned. His discussion was amplified with descriptive charts and slides relative to these cases. His talk was well summarized in pointing out specific recommendations for the diagnosis and management of bacterial shock conditions. A lively discussion period followed his formal presentation.

Dr. Seymour Monat was the speaker.

A high percentage of Society members were present.

This was a well received program and the Society is indebted to Dr. Monat for a most interesting and informative program. The meeting was concluded by a short business period. Sixteen physicians were in attendance. Ray McIntyre, Field Secretary of the State Medical Association, was a guest.

V. P. Muenster, M.D., *Secretary*

FIFTH DISTRICT

BYRON M. STUART, COUNCILOR, BOONVILLE

Audrain County Medical Society

A joint dinner meeting of the Audrain, Callaway and Montgomery county medical societies was held at the Country Club in Mexico on Tuesday evening, October 17.

A social get-together preceded dinner and the formal program.

Those in attendance were privileged to hear an excellent talk on "Murder, Mystery, and Man." This intriguing subject was presented by John P. Wyatt, M.D., St. Louis, Professor of Pathology at St. Louis University School of Medicine, and Chief Coroner's Pathologist for St. Louis County.

Dr. Wyatt covers this subject in an interesting manner and we are indebted to him for an outstanding presentation.

Gordon Shaw, M.D., *Secretary*

SIXTH DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The regular monthly meeting of the West Central Missouri Medical Society was held at the Wagon Wheel Cafe, Harrisonville, Thursday evening, October 12. The usual social hour preceded a fine steak dinner.

Following dinner, the meeting was called to order by President Robert Magee who introduced Dr. Joseph L. Fisher, St. Joseph, as speaker. Dr. Fisher spoke on "General Practice and X-Ray Radiation." He presented an interesting subject, well illustrated with slides, which was well received by those present.

There was a short business meeting following the scientific program at which time our Councilor, Dr. Barger, discussed matters before our state association.

Some discussion was held relative to the aged medical care problem which still seems to be drawing undue attention. Dr. Pearse discussed some matters relative to meeting our expenses for the Athletic Injury Symposium in the future and several suggestions were made in this regard. He mentioned the matter of the A.M.E.F. donation and suggested that it be sent to Missouri University School of Medicine for the Student Loan Fund. Dr. Barger said that he did not think this could be done and that it would have to be designated to the medical school itself. Discussion came up as to whether or not we should postpone the coming November meeting due to the closeness of this meeting to that of the State GP meeting in Kansas City the 4th and 5th of November. It was decided that there would be no conflict and that the meeting would be held in Butler at the Inn Hotel the second Thursday, November 9.

Applications of Phillip M. Shepherd, M.D., Eldorado Springs, who has recently become associated with Dr. Robert Magee, in the general practice of medicine; Dr. Edward Rink and Dr. Joe D. Combs, who have become in past months members of the staff of the State Hospital at Nevada were received, reviewed by the Credentials Committee, and passed favorably upon. Their applications were approved and they were voted into full membership of the society.

Carter W. Luter, M.D., *Secretary*

NINTH DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

A joint dinner meeting of the Mid-Missouri Medical Society, the doctors' wives, and the dentists and their wives of the area, was held at Pippins Resort, Waynesville, on Thursday evening, October 12. The evening festivities began with a social hour at 6:30 p.m., followed by a bountiful dinner and then a special program of interest to all.

The program consisted of an interesting and informative discussion on "Medical and Dental Problems Common in Oral Surgery," by Rex Witherspoon, D.D.S., and J. C. Brown, D.D.S., oral surgeons of Springfield.

In addition to enjoying the scientific discussion, those present from all indications fully enjoyed the atmosphere of Pippins Resort.

M. K. Underwood, M.D., *Secretary*

TENTH DISTRICT

W. D. ENGLISH, CARDWELL, COUNCILOR

Butler, Wayne and Ripley County Medical Society

The Butler, Wayne & Ripley County Medical Society held its monthly meeting Tuesday, October 24, at 6:30 p.m., at Poplar Bluff Westwoods Hills Country Club. The wives were invited to this meeting and a total of 44 people were present for dinner and an additional five people were present for the professional part of the program.

The scientific part of the program was conducted by Neil Wortley of the Missouri State Department of Health. There was a discussion on the local needs and responsibility to the physicians in providing, especially, the medical care and facilities for care of the aged. It was a stimulating discussion with Mr. Wortley pointing out the necessity that proper local action be taken at the present time or the probability that governmental action be necessary.

Mrs. Flo Engelhardt asked that the medical society assist in once again formulating a Woman's Auxiliary to the Medical Society. The president of the medical society stated that we shall so take action and have an Auxiliary in this area. The meeting adjourned at 9:00 p.m.

E. T. Hansbrough, M.D., *Secretary*

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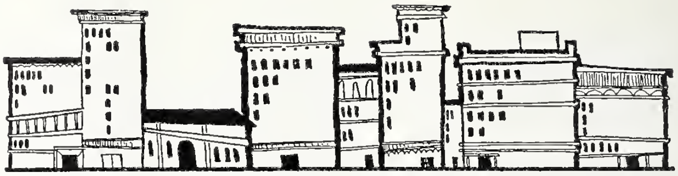
From the Medical Schools



WASHINGTON UNIVERSITY

Awards, New Officers

New officers were elected and six students given awards for excellence in scholarship at the October meeting of the Washington University Medical Society. Dr. F. Edmund Hunter, Jr., professor of pharmacology, was named president of the society. Dr. William H. Daughaday, associate professor of medicine, was elected vice president. Dr. Lillian Recant, associate professor of medicine and of preventive medicine, is serving as secretary.

The undergraduates receiving scholarship awards were David Nelson, Detroit, Mich., the Roche Award of a watch and scroll for outstanding scholarship during the first two years of medical school; Pedro Cuatrecasas, Washington, D. C., the Alumni Scholarship Award of $200 for general excellence in work during the preceding year; George B. Eagleton, Tekamah, Neb., and Stanford I. Lamberg, University City, Mo., the McCordock Book Prizes for excellence in pathology; John Bigger, Jr., Anniston, Ala., the George F. Gill and Kehar S. Chouke Prizes for superior work in anatomy during the freshman year, and Ronald Gene Evens, Herculaneum, Mo., the Biochemistry Prize for excellence in that field.

Elected to the Medical Society Council were Dr. Sarah Luse, associate professor of anatomy and of pathology; Dr. B. V. Jager, associate professor of medicine; Dr. Ralph B. Woolf, associate professor of obstetrics and gynecology, and Dr. William Monafo, Jr., instructor and clinical trainee in surgery.

Dr. Charles Parker, instructor and U. S. Public Health Service special research fellow in medicine, discussed "Recent Advances in Detection of Penicillin Hypersensitivity" at the meeting. The research was done in collaboration with Dr. Milton Kern, assistant professor of microbiology, and Dr. Herman N. Eisen, professor and head of the department of microbiology. A paper on "Glutamic Dehydrogenase: The Effect of Coenzyme on the Enzyme Structure" was presented by Dr. Carl Frieden, assistant professor of biological chemistry. "Ovarian Steroid Biosynthesis: Relation to Stein-Leventhal Syndrome" was discussed by Dr. France Alexander, fellow in obstetrics and gynecology. Associated in the research were Dr. Matthew W. Noall, research assistant professor of obstetrics and gynecology, and Dr. Willard Allen, professor and head of the department of obstetrics and gynecology.

Grants

Washington University School of Medicine has been awarded $527,773 in new research training and miscellaneous grants from the United States Public Health Service. In addition, staff members and departments have received $1,506,052 in renewal contracts for research projects and training programs now in progress through previous USPHS support.

Largest new research grant of $79,816 was awarded Dr. John R. Smith, associate professor of medicine, for support and expansion of the research, teaching and patient care facilities of the cardiovascular division of the medical school, which he directs.

A $51,237 grant for study of alcoholism has been awarded Dr. David J. Pittman, research associate professor of sociology. Coinvestigators are Dr. George A. Ulett, professor of psychiatry, and Miss Dorothy Stauffer, of St. Louis City Hospital. The grant will be used in the treatment of alcoholic patients in the Malcolm Bliss Mental Health Center and to provide referral services for the patients.

A $34,098 grant to Dr. William H. Daughaday, associate professor of medicine, and Dr. David Kipnis, assistant professor, is for a study on the measurement of protein hormones in human plasma.

Dr. Joseph H. Ogura, professor of otolaryngology, was awarded $26,450 for study of laryngeal prosthesis.

A $22,310 grant to Dr. Robert A. Moses, associate professor of ophthalmology, will support a study of granulomatous uveitis.

Metabolism in chronic anemia, burns and alcoholism will be studied by Dr. Carl A. Moyer, Bixby professor and head of the department of surgery, with a $19,903 grant.

A $17,607 grant to Dr. Kathleen Smith, associate professor of psychiatry, will be used to determine the origin of characteristic odor of schizophrenic sweat.

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Drs. Martin and Ruth Silberberg, associate professors of pathology have been awarded $17,371 to determine the pathogenesis of osteoarthritis.

Dr. J. Neal Middelkamp, assistant professor of pediatrics, has been awarded $14,516 to study placental transfer of viruses.

An award of $13,866 to Dr. Harlan J. Spjut, associate professor of surgical pathology, will finance a study on drug induced colonic polyps and carcinomas in rats.

Dr. Robert B. Dodd, professor and head of the division of anesthesiology, was awarded $8,437 to study the production of muscular relaxation in the body during surgical anesthesia.

A $3,000 grant to Dr. John A. Stern, professor of medical psychology, and Dr. George A. Ulett, professor of psychiatry, will be used to apply specialized computer technics developed at McDonnell Aircraft Company to the analysis of brain wave data records obtained from normal and schizophrenic subjects.

Three Washington University staff members were awarded new research grants, supplementing previous awards from the Public Health Service. Dr. Robert E. Kuhlman, fellow in orthopedic surgery, received $36,931; Dr. Sidney F. Velick, professor of biochemistry, $22,180, and Dr. Harvey R. Bernard, associate professor of surgery, $4,333. Two research instructors in the department of psychiatry were named Mental Health Career Investigators.

Dr. James H. Satterfield was awarded $20,921 to develop methods of electronically recording the action of the nervous system in awake reacting normal subjects and in psychiatric patients.

Dr. Mark Stewart was awarded $17,908 to study nerve chemistry technics which he will apply to work in mental retardation. Special research career awards were awarded to Dr. Eli Robins, professor of psychiatry, and Dr. Sidney F. Velick, professor of biochemistry.

Dr. Malcolm L. Peterson, assistant professor of medicine, received $35,704 for graduate training in gastroenterology.

Dr. Loretta K. Cass, assistant professor of medical psychology, was awarded $2,400 for graduate training in the division of child psychiatry.

History Society

The first meeting of the History of Medicine Society of Washington University School of Medicine was held in November. Dr. Alrick Hertzman of St. Louis University discussed the concept of circulation and a film was shown on William Harvey and his work with circulation of the blood. The group was organized to provide a forum for those in the community with an interest in the history of medicine.

Lectures, Meetings

Two papers were presented by faculty members at the October meeting of the American Society of Clinical Hypnosis in St. Louis. Dr. George A. Ulett, professor of psychiatry, reported on "The GSR in Experimental Amnesia." The research, which is still in progress, is being done with Drs. Abraham Levitsky, John A. Stern and William Edmonston, Jr. Dr. Edmonston, who is an instructor in medical psychology, presented a paper entitled "Abraham Lincoln and the Nest-Builders: Role-Taking Theory Re-Evaluated." Dr. Estelle Brodman, librarian and associate professor of medical history, was among instructors in a postgraduate course on research methods at the Armed Forces Institute of Pathology, Washington, D. C. Dr. Herman N. Eisen, professor and head of the department of microbiology, was among specialists who discussed latest findings in allergy research at the Fourth International Congress of Allergology in New York City. He spoke on delayed hypersensitivity to simple chemicals.

Dr. Robert Shank, Danforth professor and head of the department of preventive medicine, spoke at an evening session of the American Dietetic Association, which met in St. Louis in October.

Several faculty members are appearing at the fall postgraduate course on anatomy sponsored by the St. Louis Medical Society. They are Dr. R. R. Peterson, "Recent Advances in the Cytology of the Pituitary"; Dr. M. S. Anderson, "Recent Advances in the Structure and Function of the Kidney"; Dr. J. F. Larsen, "Biology of the Mammalian Fetus" and "Recent Investigations on the Placenta"; Dr. Sam Clark, Jr., "Lymphoid Tissue and Immunity," and Dr. Bryce Munger, "Electron Microscopy and Its Application to Study of Disease Processes." Douglas Anderson, a senior student, will speak on bone growth.

Three faculty members participated in a medical forum in October on cancer. It was the first of four public forums to be presented by the St. Louis Medical Society and the *Globe-Democrat*. Participating were Dr. Harvey R. Butcher, Jr., associate professor of surgery; Dr. David Johnson, assistant professor of pathology, and Dr. Virgil Loeb, Jr., assistant professor of clinical medicine.

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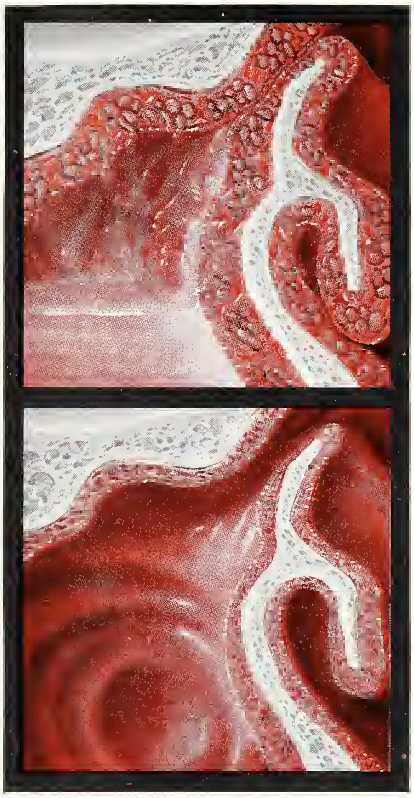

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1. Grant, L. E.: Coryza and nasal sinus infections, **Clin. Med. & Surg.** 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, **Journal-Lancet** 79:535, Dec., 1959.

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surgical pathology, and Dr. Thomas H. Burford, professor of thoracic and cardiovascular surgery, spoke at the Faun S. Mulliken Nurses' Symposium sponsored by the St. Louis and St. Louis County units of the American Cancer Society.

Dr. Thomas Brugger, director of the child psychiatry clinics, spoke at a program sponsored by the Clayton Board of Education and the Family and Children's Service of Greater St. Louis in the first of a series on "Your Child—Understanding and Meeting His Needs."

National Appointments

Dr. Edward W. Dempsey, dean of the school, has been named a member of the National Advisory Health Council. The 15 member committee meets three times a year to review applications for government research and training grants and to advise the Surgeon General on activities of the Public Health Service. He was named for a four-year term.

Dr. Oliver H. Lowry, professor and head of the department of pharmacology, met in Washington, D. C. in October as a member of the President's panel on Mental Retardation. The panel discussed new approaches for prevention and cure of mental retardation.

Visitors

Dr. Christian Astrup, psychiatrist at the University of Oslo, Norway, visited Washington University in October, and spoke to several groups. For the last year he has been doing research at Johns Hopkins University. Dr. Samuel Bessman, professor of pediatric research and associate professor of biochemistry at the University of Maryland School of Medicine, spoke recently at a seminar sponsored by the departments of pharmacology and pediatrics. His subject was "Imidazole Amino Acid Uria—A Possible Genetic Marker in Juvenile Tay-Sachs Disease."

UNIVERSITY OF MISSOURI

Awards Convocation Held

Ten students in the University of Missouri School of Medicine were presented eleven undergraduate awards for outstanding scholarship during a special Awards Convocation October 26. Dr. Theodore E. Keats, professor of radiology and chairman of the Scholarships and Awards Committee of the School of Medicine, presented ten of the awards. The eleventh, in biochemistry, was presented by Dr. Owen J. Koeppe, professor of biochemistry and chairman of the department.

The awards, recipients, and home towns of recipients or their families are: James S. Rollins Scholarship, a $50 stipend awarded in recognition of merit and character, to George B. Lutman, 511 Jefferson, Versailles; University of Missouri Medical School Foundation Scholarship, a $50 stipend awarded for excellence in scholarship and in scientific leadership, to Earl D. Scott, Star Route, Bonnots Mill, Mo.; Dr. John C. Parrish Medical Scholarship Fund third year medical student scholarship, a $250 stipend awarded for scholarship and character, to Michael J. Kowertz, Lexington, Mo.; formerly of Warsaw, Mo.; Roche Scroll and Gold Watch Award to Clarence E. Ridenhour, Belle, Mo.; Medical Biochemistry Book Award, from the department of biochemistry, to Ronald C. James, Dixon, Mo.; Biophysics Honor Award, to Ronald C. James; the C. V. Mosby Book Awards, to Roberta L. Lowry, Mercer, Mo.; George R. Huggins, 1012 White Cliff Drive, Kirkwood, Mo.; Clarence E. Grim, 13230 Ocean Drive, Corpus Christi, Texas; Herbert M. Rubin, 5019 Forest, Kansas City, Mo.; and Vincent S. Mayer, Jr., 503 W. 86th, Kansas City, Mo.

Meetings

The scientific portion of the program for the second annual M-D Day, October 27-28, at the University Medical Center was presented as a joint effort of the faculties of the University of Missouri School of Medicine and the University of Nebraska College of Medicine. Sessions were held in the Medical Center auditorium. Five members of the University of Nebraska medical faculty formed the guest faculty for M-D Day, the other participants in the scientific program being members of the University of Missouri medical faculty, and one student of the medical school. Guest faculty members were J. Perry Tollman, M.D., dean of the Nebraska College of Medicine; Roy G. Holly, M.D., professor and chairman of the department of obstetrics and gynecology; Howard B. Hunt, M.D., professor and chairman of the department of radiology; C. A. McWhorter, M.D., professor and assistant chairman of the department of pathology; and Merle M. Musselman, M.D., professor and chairman of the department of surgery.

The University of Missouri School of Medicine was represented with papers by Gene Ridenhour, third-year medical student, Russell E. Hanlon, M.D., instructor in obstetrics and gynecology, and Carl H. Almond, M.D., assistant professor of surgery.

The Central Missouri Hospital Council, covering 12 Central Missouri counties, held a dinner

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meeting at 4:00 p.m., October 18, in the private dining room at the University of Missouri Medical Center. The speaker at the meeting was Ray Jiedel, treasurer of the Board of Trustees of Bothwell Hospital, Sedalia.

Vernon E. Wilson, M.D., dean and director of the Medical Center, spoke on the history of medical education in the Mississippi Valley Region at the meeting of the Medical History Group, held October 12 in the Medical Sciences Building. Dean Wilson said the Mississippi Valley has been the scene of some of the bitterest struggles in the history of medical education. He talked about such men as Daniel Drake, Benjamin Dudley, and John Eberle, who, he said, "made substantial contributions to the progress of medical education as well as to the refinements of oral and written vituperation."

Trips and Talks

Dr. Paul E. Benoit, assistant professor of anatomy, visited the Southwest Foundation for Research and Education in San Antonio, Texas, to obtain papio anubis baboons for use in teaching and research and to initiate studies in collaboration with Dr. Joseph W. Goldzieher of the Southwest Foundation concerning the problem of innervation of the ovaries in the higher primates.

Drs. Owen J. Koeppe, professor of biochemistry, Arnold A. White, associate professor of biochemistry, John M. Franz, associate professor, and Benedict J. Campbell, assistant professor, and graduate students Robert Horton, Arthur Schneider, Arnold Smith and Clarence Grim, attended the Biochemical Conference (West Central States) in Ames, Iowa, October 13 and 14. Dr. Koeppe talked on "The Enzymatic Synthesis of Benzoyl Ornithines," Dr. White on "The Effects of Toxic Doses of Parathyroid Hormones and Vitamin D_2 on the Serum Protein of the Rat," Dr. Campbell on "Structural Studies on the Sheep a_1-Acid Glycoprotein," and Robert Horton gave a talk on "The Effect of Cortisone on Incorporation of Labeled Amino Acids into a Liver Protein Fraction Rich in Tryptophan Pyrrolase."

Dr. Frank B. Engley, Jr., professor and chairman of the department of microbiology, was moderator of a panel on "Histoplasmosis" at an Interprofessional Seminar held at the Medical Center and sponsored by the State Division of Health and the School of Medicine. On September 26, Dr. Engley and Dr. James Barrett, associate professor of microbiology, visited the Virology and Mycology Laboratories at the Kansas City Field Station of the Communicable Disease Center U.S.P.H.S. and the Midwest Research Institute in Kansas City. Dr. Barrett also visited the Communicable Disease Center and Midwest Research Institute, in Kansas City, October 3. Dr. D. P. Durand, assistant professor of microbiology, attended a Symposium on the Biological Aspects of Viruses in Relation to Medical Problems, sponsored by St. Louis and Washington Universities, October 13, at the Jewish Hospital in St. Louis.

Robert L. Jackson, M.D., professor and chairman of the department of pediatrics, presided over the Missouri State Diabetes Assn., Inc., as president, October 26, in the Medical Sciences Building, at the Scientific program of the Council Meeting. It was the consensus of the meeting that the diabetes detection drive in Sullivan was successful because of the support of the North Central Counties Medical Society and the active participation of the local physicians. It is hoped that other areas of the state will undertake similar surveys, using the method developed in Sullivan as a model. The Diabetes Association is indebted to the State Health Department for help in conduction of the survey and statistical analysis of the results.

Dr. Jackson also attended the AMA Council on Foods and Nutrition at Stanford University at Palo Alto, Calif., October 21. This Symposium on Adolescence placed its major emphasis on discussion of fat metabolism and the problem of obesity in the adolescent child. Medical and nutrition specialists attended.

Dr. Harry Stoeckle, associate professor of pediatrics, attended the American Heart Association meeting October 20-22 in Miami, Fla., the topic of discussion of the meeting being "Clinical, Surgical and Basic Cardiology."

Clement E. Brooke, M.D., and Ernest E. McCoy, M.D., associate professors of pediatrics, attended the annual meeting of the Markle Scholars from the United States and Canada at Jasper Lodge, Alberta, Canada, September 11-13. The meeting, sponsored by the John and Mary Markle Foundation, was for the purpose of discussing some major problems in medicine and medical education. Dr. Brooke has been a Markle Scholar from 1956 to 1961. Dr. McCoy was elected a Markle Scholar in 1959. Invited speakers and discussors included Dr. Brock Chisholm, Director-General of World Health Organization; Dr. Abel Wolman, professor of sanitary engineering, the Johns Hopkins University; and Dr. Robert S. Morison, Director of Medical and Natural Sciences, Rockefeller Foundation.

Drs. Jackson, Constantine Anast, associate professor, Leovigildo Cokingtin, instructor, George Baker, assistant instructor, and Harold Martin,

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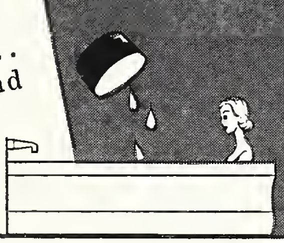

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assistant instructor, attended the 30th annual meeting of the American Academy of Pediatrics in Chicago, October 2-5. While there Dr. Jackson attended a dinner meeting of the chairmen of the pediatric departments throughout the country.

Dr. Ivan N. Mensh, professor and head, division of medical psychology, University of California Medical Center at Los Angeles, visited the department of psychiatry here where he participated in teaching activities of the department.

The Psychiatric Receiving Center of Kansas City, Mo. was awarded the 1961 gold medal of the American Psychiatric Association at its mental hospital meeting in Omaha, Nebraska, in October. Each year the APA selects one mental institution for this unusual recognition. This year the honor came as a special tribute to the Kansas City institution, which has been affiliated with the Department of Psychiatry at the University of Missouri School of Medicine for several years. Approximately half of the students at the University here receive clinical training in psychiatry at the Psychiatric Receiving Center. Dr. Robert H. Barnes, executive director of the Kansas City institution, is also a clinical associate professor of psychiatry at the Missouri University Medical Center, and the following members of Dr. Barnes' staff also hold clinical appointments in the department of psychiatry: Drs. Charlotte M. Brewster, Lee D. Hanes, Robijn K. Hornstra, George J. Lytton, and Charles B. Wilkinson.

Dr. Jacob O. Sines, associate professor of clinical psychology, visited the Fulton State Hospital Psychology Department to discuss "A Rationale for the Use of Objective Tests of Personality," October 10. The characteristics of objective tests are such that their use would seem to promise greater efficiency and accuracy in the description and understanding of personality structure in significant proportion of persons tested. One method for the development of their use and some of the preliminary results were presented for discussion.

Drs. Davis, associate professor, Marco, assistant professor, and Froelich, assistant professor of psychiatry, and Mr. Meier, and Miss Perry attended a Psychoanalytic Foundation of St. Louis meeting in St. Louis, October 26. Leo Rangell, President of the American Psychoanalytic Association spoke on "The Capacity to Be Alone."

Drs. Davis, Tapia, Sines, Kabrick, Mr. Meier, Mrs. Fields, Mrs. Roeklke, Mr. Rasmussen, and Miss Perry attended a dinner and lecture at a meeting of the Eastern Missouri Psychiatric Society in St. Louis October 24. Dr. Max Fink, Director of Experimental Psychiatry at Hillside Hospital in Glen Oaks, N. Y., spoke on "Mode of Action of Convulsive Therapy."

John J. Modlin, M.D., professor and chairman of the department of surgery, and Carl Almond, assistant professor of surgery, attended the Coller Surgical Society meeting in Milwaukee, Wis., Sept. 28-30. Dr. Modlin attended as a guest of the society, Dr. Almond as a member. They also visited the department of surgery at Marquette University while in Milwaukee. Dr. Modlin also attended the 47th Annual Clinical Congress of the American College of Surgeons in Chicago October 1-4. He acted as presiding officer at the forum session on papers pertaining to cancer research.

Kenneth K. Keown, M.D., professor of surgery (anesthesiology), attended a one day course in the Medical, Surgical and Anesthesiological Management of Patients With Heart Disease in Jackson, Miss., Oct. 13, sponsored by the University of Mississippi School of Medicine and the Mississippi Heart Association. Dr. Keown also attended the annual meeting of the American Society of Anesthesiologists, in Los Angeles, Calif., Oct. 20-24. New developments and research activities were presented to the anesthesiologists from the United States and Canada. G. W. N. Eggers, Jr., M.D., associate professor of surgery (anesthesiology), attended the Los Angeles meeting on October 24. The topic for that day was "The Hemodynamic Responses to Oxygen Breathing" which was from original research work, and presented to the anesthesiologists for the first time.

John H. Landor, M.D., assistant professor of surgery, was initiated into the American College of Surgeons at the meeting in Chicago, October 1-6. Dr. Almond also attended the American College of Surgeons meeting where he was awarded a fellowship.

Hugh E. Stephenson, M.D., professor of surgery, attended the American Association for the Surgery of Trauma, meeting at the Drake Hotel in Chicago, Sept. 29 and 30. Samuel P. W. Black, M.D., professor of surgery (neurosurgery), attended the meeting of the American College of Surgeons in Chicago, October 3-6.

John A. Buesseler, M.D., professor of surgery (ophthalmology), was a guest speaker for the 39th Annual Fall Clinical Conference sponsored by the Kansas City Southwest Clinical Society held Sept. 18-20. On Sept. 18 Dr. Buesseler presented a seminar on "The Red Eye," which consisted of an elaboration of the physical signs and symptoms encountered in the clinical eval-

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uation of inflamed eyes. He also presented a lecture on "Diagnosis of Glaucoma" which dealt with the role of general medicine as well as of ophthalmology in the teamwork needed to uncover and treat cases of glaucoma being specifically outlined. Special emphasis was placed on the routine examination technics which must necessarily be utilized in glaucoma case finding among patients visiting the office of any practicing physician. He also presented a symposium on "Eye Injuries in the Home," an illustrated categorization of various causations and manifestations of both superficial and severe injuries of the eye and eyelids. Diagnostic criteria and modes of treatment were particularly stressed.

Dr. Ian Thompson, professor of surgery (urology), Dr. Robert Smith, assistant instructor, Dr. Gilbert Ross, instructor, attended the South Central Section of the AUA Meeting in Hot Springs, Ark., Sept. 16 through 21. Three separate exhibits were presented at the meeting by the Division of Urology: Cystinuria, Urinary Incontinence, Cause and Cure, an unusual form of ureteral ectopia. Sept. 26 through 30, Dr. Thompson attended the North Central Section of AUA Meeting in Cincinnati, Ohio, where he presented a paper, "Clinical Abnormalities of Kidney Function." He also conducted two symposia on Sept. 29 and 30 at the meeting on "Malignant Disease of the Kidneys and External Genitalia."

ST. LOUIS UNIVERSITY

Wohl Institute

The public has been invited to tour the new David P. Wohl Memorial Mental Health Institute at 1221 South Grand Boulevard, Thursday, December 14, through Sunday, December 17, it has been announced by the Very Rev. Paul C. Reinert, S.J., president of St. Louis University. Guided tours will be conducted on those dates from 12:00 noon to 5:00 p.m.

Construction of the $1,500,000 structure on the site of the old National Guard Armory at Grand Avenue and Rutger Street was made possible by a $500,000 gift to the University by the late David P. Wohl, St. Louis philanthropist. Mr. Wohl's contribution was matched by grants under the Hill-Burton program and the Health Facilities Research Program of the U. S. Department of Health, Education and Welfare.

The Wohl Institute will be devoted to psychiatric care and research, including facilities for some 4,000 out-patients each year. Architect for the project was the St. Louis firm of Hellmuth, Obata and Kassabaum, Inc. Contractor was C. Rallo Contracting Company, Inc.

The new Institute was dedicated Wednesday, November 8. His Eminence, Joseph Cardinal Ritter, blessed the 60-bed institute. Delivering the principal address of the day was Dr. William C. Menninger, President of the Menninger Foundation, Topeka, Kansas. Mrs. David P. Wohl was present at the dedication.

New Grant

The Department of Microbiology of the School of Medicine has been awarded a $75,000 grant by the National Science Foundation for the support of research entitled "The Role of Macromolecular and Particulate Elements in Virus Synthesis, Cell Metabolism and Cell Division."

The award, which became effective for a two year period September 1, is under the direction of Dr. R. Walter Schlesinger, director of the department of microbiology.

The grant is primarily for the purchase and installation of an analytical ultracentrifuge, dark room and photographic equipment and other research items. The new equipment will aid in several research programs which have been in progress in the department.

Meetings

Dr. James W. Colbert, Jr., Dean, School of Medicine, attended a meeting of the National Advisory Committee to Selective Service for physicians, dentists and allied specialists in Washington, D. C., October 25 and October 26.

In view of the rising call for recruits to strengthen military forces, the group will meet to review the whole status of the draft in relation to the medical and dental profession.

Dean Colbert was named a member of the committee by President John F. Kennedy last summer.

Dr. John P. Wyatt, professor of pathology and associate director of the department, delivered the 1961 Dearholt Day lecture at Marquette University School of Medicine on November 14. His lecture was entitled "Pathodynamics of Emphysema." Dr. Wyatt has lectured extensively here and abroad, and is author of many articles on pathology and in particular on the pathology of emphysema. The lecture was established to pay honor to the life and contributions to medical and public health of Dr. Hoyt E. Dearholt, founder and executive secretary of the Wisconsin Antituberculosis Association.

(Continued on page 1256)

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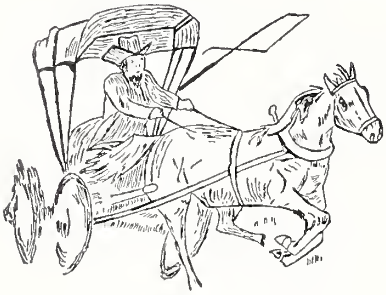

FORTY YEARS AGO

Governor Hyde has set January 31, 1922, as the date on which voters shall elect delegates to the convention for writing a new constitution for Missouri, and nominations for delegates must be in the hands of the Secretary of State by January 1, 1922. The President of our Association, Dr. Hamel, nominated Dr. Malcolm A. Bliss of St. Louis to be one of the delegates at large. The Clay County Medical Society has nominated Dr. Spence Redman of Platte City for delegate.

The State Board of Health at its meeting on October 26, authorized the creation of a division of sanitary engineering and the employment of a state sanitary engineer. The law passed in 1919 made it the duty of the State Board of Health to investigate all public water supplies in the state.

Smallpox is now raging in Kansas City and is likely to occur in other parts of the state this winter; therefore, it is important that children be vaccinated. In Nottingham, England, there have been 46 cases, 36 of them being unvaccinated persons, while Glasgow had a very serious outbreak last year. At Coventry, the medical officer of health reports 3,372 births in 1920, with only 9 per cent vaccinated and he says the community is becoming largely an unvaccinated one.

The annual meeting of the surgeons of Wabash Railroad was held at the American Annex, St. Louis, November 3. An address was made by Dr. William E. Leighton and by Dr. Francis Reder. About three hundred Wabash surgeons attended the meeting.

TWENTY-FIVE YEARS AGO

The annual meeting of the Council of the Missouri State Medical Association was held in Columbia, November 5, with thirty-nine Councilors, officers and chairmen of committees present. Dr. A. R. McComas, Sturgeon, Chairman, presided. The Secretary's report showed an increase of thirty-four members since the 1936 Annual Session and the number of delinquent members sixty-four less than a year ago. The resignation of Dr. B. Kurt Stumberg, St. Charles, Councilor of the Eighth District, because of ill health, was accepted and Dr. Frank G. Mays, Washington, was appointed to fill the unexpired term. Dr. F. A. Middlebush, President of the University of Missouri, and the Hon. Frank G. Harris, Lieutenant Governor of Missouri, were guests of the Council at lunch and delivered short addresses.

The death rate from pneumonia in Missouri in the years 1929 to 1931 averaged 120 cases per 100,000 of population; it was at least 30 cases per hundred thousand higher than in the neighboring states of Iowa and Kansas. In nearly any list of the causes of death in this country pneumonia ranks third; in 1934 it was responsible for the death of 115,000 persons. Ninety-six per cent of the cases are due to the pneumococcus; one third of these are due to Type 1 pneumococci and one third to the heterogenous Type IV organisms.

Dr. William T. Coughlin, St. Louis, head of the department of surgery of the St. Louis University School of Medicine, was guest of honor at a dinner given by the school on November 12. The dinner celebrated the completion by Dr. Coughlin of twenty-five years on the faculty. Also honored at the dinner were the following who have served similar lengths of time: Dr. Carl Barck, Dr. L. C. Boisliniere, Dr. Jules M. Brady, Dr. Edward P. Buddy, Dr. C. E. Burford, Dr. John McH. Dean, Dr. William P. Glennon, Dr. William W. Graves, Dr. Alexander E. Horwitz, Dr. Joseph M. Keller, Dr. William E. Leighton, Dr. Bransford Lewis, Dr. A. P. Munsch, Dr. Louis Rassieur, Dr. Carroll Smith, Dr. Percy Swahlen, Dr. Frank J. Tainter, Dr. Ralph L. Thompson and Dr. Hillel Unterberg. The Rev. Alphonse M. Schwitalla, dean of the school, presided, and the Very Rev. Robert S. Johnston, president of the university, read the roll of the twenty honored guests.

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TEN YEARS AGO

Melvin A. Casberg, M.D., St. Louis, Dean of the St. Louis University School of Medicine, St. Louis, has resigned from that position, to be effective on July 1, 1952, for reasons of health.

An oil painting of Dudley S. Conley, M.D., Columbia, Dean Emeritus of the University of Missouri School of Medicine, was presented to the University by alumni of the medical school on November 9 at a faculty-student assembly in McAlester Hall. Dr. R. Claude Bruner, president of the School of Medicine Alumni Association, made the presentation. Dr. Conley was dean of the Medical School from August 1, 1933, until his retirement on August 31, 1948.

WOMAN'S AUXILIARY

(Continued from page 1200)

beating anyone, you will see your own people, and your heart will break. She said she was asking nothing for her people because it was too late, but she hoped that we would wake up in time to keep our country free. She reminded us that the Fall of Rome was accompanied by ten centuries of the Dark Ages, and we should realize that Russian peace terms are total submission.

We are told through our Civil Defense program that our survival may well depend upon our individual initiative and planning. As plans today stand, each family is given the responsibility of providing for its own members, in the event of national disaster. A national Medical Self Help Program is soon to be launched to instruct Americans how to care for themselves in the event disaster strikes and families are on their own without doctors and their survival will depend upon how they can handle the situation.

All of our federal disaster plans call for individual responsibility to survive disaster. If assuming personal responsibility is the key to survival in the face of disaster, it certainly becomes our most important weapon in warding off disaster.

Our Auxiliary program is geared to our individual responsibility to aid our communities by solving local problems on the local level, and thereby solving our national problems. Many persons feel the threat to our Nation is not the military might of Russia, but our own apathy. The early Pioneer Mother of our country had to be alert to danger or her family did not survive. The early pioneer had little difficulty in recognizing danger. Today our dangers are cloaked in many disguises, that attempt to lull us into tranquillity. The tallest monument will stand, only so long as the foundation remains firm. The foundation of America rests upon its local communities, and this is the area where we strive to serve.

FROM THE MEDICAL SCHOOLS

(Continued from page 1252)

Founders Week

Medical Alumni celebrating reunion years were honored at a cocktail party given by Dean Colbert in Miller Hall of Desloge Hospital on October 19. A scientific program was presented for medical graduates of the University on October 20. Participants in the program were: Dr. George L. Curran, associate professor of medicine; Dr. Rene Wegria, director of the department of medicine; Dr. R. Walter Schlesinger, director of the department of microbiology, and Dr. George E. Thoma, associate professor of clinical medicine.

Dr. Matthew W. Weis, a 1924 graduate of the School of Medicine, was the recipient of the Alumni Merit Award. Dr. Weis has been a gynecologist and obstetrician at St. John's Hospital and St. Louis University for many years. He has conducted studies on maternal mortality and is past president of the St. Louis Gynecological Society. He is a charter member of the University's President's Council and first chairman of the Alumni Fund Council. He was declared a Knight of the Holy Sepulchre by Pope John XXIII. Dr. Weis received his award at the University's All Students Convocation held in the University Gymnasium November 23. He was also honored at the All-Alumni Dinner Dance held at the Missouri Athletic Club October 21.

Awardees for twenty-five years of service on the medical faculty or staff of the University were: Philip A. Conrath, director of the section of medical illustration; Dr. George Thomas Gafney, assistant professor of clinical surgery; Dr. William B. Harkins, associate professor of clinical otolaryngology; Dr. Curtis H. Lohr, senior instructor in internal medicine; Dr. Philip S. Luedde, an assistant professor of clinical ophthalmology; Miss Margaret E. McCormick, Secretary, department of biochemistry, and Dr. Robert G. Warner, instructor in internal medicine.

CLASSIFIED ADS

PHYSICIAN—to travel Midwest with Mobile Medical Center. Diagnostic examinations for non-profit organization. Opportunity for wife as assistant technician. Write Medical Director, Garment Industry Medical Center, 4646 Lindell, St. Louis 8, Mo.

FOR SALE—Fluoroscope—late model, perfect condition. Aloe, full length. Very reasonable. Contact Box 262, c/o Missouri State Medical Association, 623 Missouri Theatre Building, St. Louis 3, Mo.

FOR SALE—General office furniture, equipment, portable x-ray, and assorted surgical instruments. For further information contact Mrs. Rachel D. Taylor, Desloge, Missouri.

WANTED—Physician, M.D., Army exempt. Will consider older man to associate with two established M.D.'s in St. Louis County. Salary open. Contact Box 263, c/o Missouri State Medical Association, 623 Missouri Theatre Building, St. Louis 3, Mo.

ASSOCIATE WANTED—IN GENERAL PRACTICE: An established practice in a town of 2,500 near Kansas City, Mo., with a new office building to be completed about October 15, 1961. Plans for partnership agreement when mutually desired. Contact A. W. Eklund, M.D., Pleasant Hill, Mo., for details.

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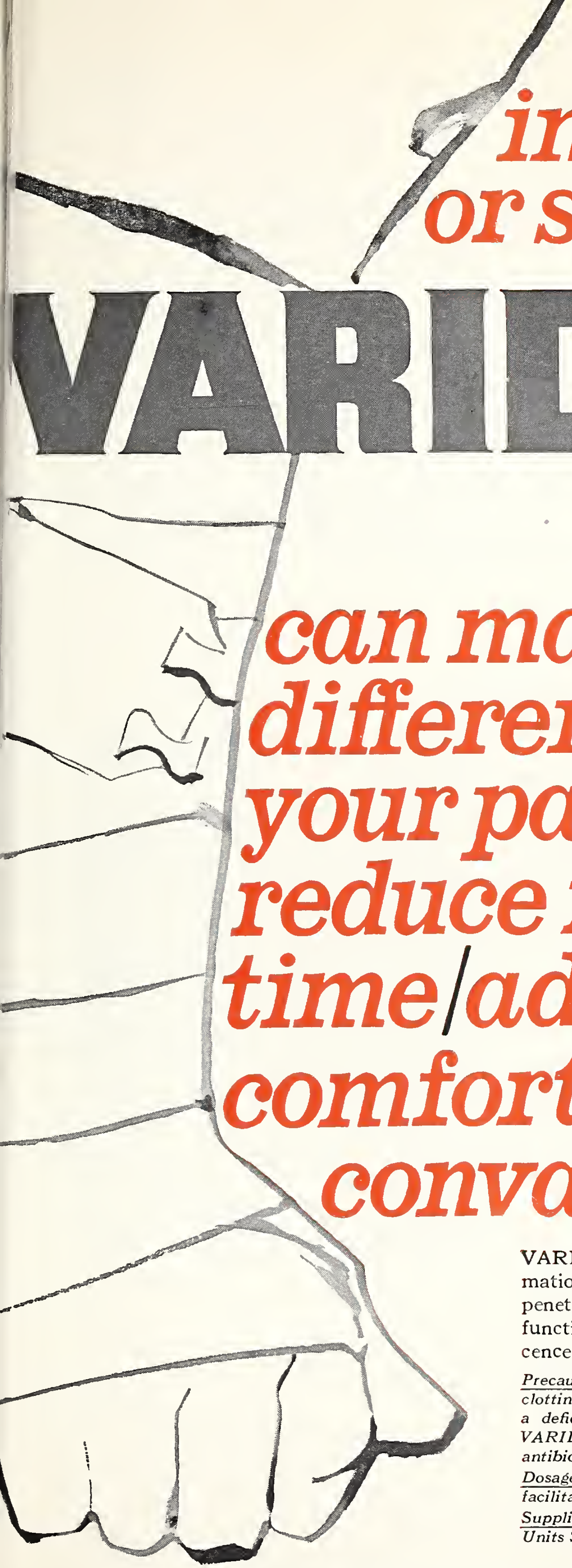

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Missouri Medical Meetings

Missouri State Medical Association, Hotel Chase, St. Louis, March 18-21, 1962.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—fourth Tuesday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—first Tuesday of each month at the St. Francis Hospital, Washington, at 7:00 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—March, May, October and December.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets third Friday of each month.
Johnson County Medical Society—meets only on call.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month. 7:30 p.m.
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)—fourth Thursday of each month.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Nodaway-Holt-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—third Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.
Webster County Medical Society—meets only on call.
West Central Missouri Society (Bates-Cass-St. Clair-Vernon-Cedar)—second Thursday of each month.

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